

# The Home HANDYMAN

January/February 2016 • Vol 23 No 1  
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SA'S  
ORIGINAL  
**DIY**  
MAGAZINE

## Maintain your home

Guide to routine assessments  
and repairs to:

- Walls, windows and doors
- Plumbing
- Roofs and gutters
- Security systems



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LOUNGER**



**CONSTRUCT A  
PORTABLE FLOWER BOX**

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### **Solid timbers**

What to consider when  
selecting solid timber



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**Overview of sanders and sanding techniques**



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# RoofFix

## The Easy Way To Fix Roof & Ridge Tiles In A Jiffy!

- Apply RoofFix to a sound and clean surface
- Remove all loose particles carefully before application
- Mix a small amount of roof paint to the RoofFix to match the roof colour. (Alternatively, paint over the roof tiles later)
- Dampen facing surfaces first & apply RoofFix generously with a spatula to the facing edges or surface
- Join broken roof tiles in sections: small together first and large last
- Remove excess RoofFix
- Gently smooth the RoofFix with a dampened cloth
- Allow to dry for 4-8 hours
- Voila!

RoofFix is a flexible compound with exceptional adhesion properties.

This also makes it an ideal crack filler and skim plaster.

It is very user-friendly and can be used on many other items - even to repair pots and bird baths!

*Be Prepared for  
the rainy season!*

# RoofFix

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**DIY  
MADE  
EASY!**



# New Year new challenges

We hope that you had a good festive season and that Father Christmas brought you lots of power tools! Towards the end of 2015, I encountered a woodworking challenge that I would like to share with you. Wood glue is extremely strong and continues to amaze me. I was gluing some hardwood panels together... it was my first time using ordinary cold wood glue and I stuck one board the wrong way around, despite having labelled them clearly beforehand. For some reason, I thought gluing all eight panels together at once would give a better finish than gluing a few at a time, as I had done previously without incident. My inexperience was compounded by the panic that comes with short drying times.

The glue I was using had a 10-minute working time and a minimum clamping time of two hours. I managed to apply glue to the five edges neatly with a brush within the 10 minutes before lining up the panels and clamping. The boards were clamped for a minute or two before I noticed that one was the wrong way around. I quickly released the clamp but the glue had already created what felt like a vacuum and separating the panels wasn't easy.

After tugging four of the panels away from the whole, breaking one in the process, I re-clamped the others again before washing the incorrectly assembled boards with a cloth and water. After some calm was restored, I revisited the loosely clamped boards that didn't quite form a flat surface, and gave them a few thumps with the rubber mallet. Even with all the moving around and readjustment, I achieved a strong bond when testing the panel eight hours later. I'm not looking forward to the hours spent fixing this year's misadventures, but that's how you learn.

All the best for the year ahead.

**Gareth Greathead, Editor**



## The Home HANDYMAN

www.homehandyman.co.za

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The Home HANDYMAN PUBLISHING

# CONTENTS

# FEATURES



## Competitions & giveaways

- WIN** a Makita DUB182Z 18V Cordless Blower.....7
- WIN** a Triton Superjaws from Vermont.....11
- WIN** a hamper from *The Home Handyman* .....25
- WIN** a R2 500 Handles Inc voucher .....62

## 12 Home buyer's checklist

Do these basic checks before purchase and you may avoid unexpected expenses later

## 14 Home maintenance guide

Disciplined maintenance will ensure maximum appreciation of your home

## 20 Solid timbers

Fundamental aspects of solid timbers in woodworking

## 26 Make a garden lounger

*Clifford Roberts* and woodworker *Andries Eyegelaar* show how they converted old curtain pelmets into fancy Adirondack-style chairs

## 30 How pool covers save money

With drought affecting much of the country, pools may be used for more than swimming in the months to come

## 32 The Home Handyman 2015 index

Looking for a specific feature covered last year? This handy reference will guide you to the right issue

## 34 Sustainable energy

How the development of PV solar technology benefits you

## 36 Electric sanders

Techniques, tips and materials to improve your sanding skills and the end result

## 40 Flower box project

A simple step-by-step project to jazz up your home or garden

## 43 Woodworkers profile

Hennie Ackermann, proves that you don't need a workshop filled with tools to enjoy woodworking

## 44 Car-care tips

Keep the exterior of your vehicle in tip-top condition

## 46 Screwdrivers, screws and bits

Save yourself the aggravation of stripped screws by using the correct driver

## 50 Dishwasher care

Ensure dishwasher longevity with routine maintenance

## 52 Woodworkers diary

Denis Lock discusses pros and cons of using dowels versus biscuit joints





# REGULARS

## 4 Off the shelf

All the latest products for the DIY'er

## 6 Voice your views

Your chance to air an opinion

## 8 DIY matters

News, views and reviews from around the globe

## 10 Ask our experts

Your DIY queries answered by our panel of experts

## 25 Bright ideas

Readers share their innovative time- and space-saving DIY ideas

## 56 Woodworker's corner

An opportunity for readers to showcase their work

## 61 Let's get social

DIY has a social media side as well

## 62 Subscriptions

Save by subscribing to *The Home Handyman* and win great prizes

## 64 Tailpiece

Reuben the Screwman scares the daylight out of some big men from the SANDF with a replica of a human hand



## Home maintenance kit in a bag

There are some household chores, like the lubrication of hinges, that never get done, mostly because finding what you need in the garage is a nightmare. Sometimes it isn't possible to anticipate what area of your home will need attention next. Herschell has developed a Home Care Kit in a bag that will help you deal with most cleaning, lubrication and damp issues.

### The kit includes:

- Silicone Damp Cure Spray to seal mortar and grout from moisture.
- Multi-Purpose Spray, which penetrates, lubricates, removes rust and moisture.
- Silicone Spray is a clean, clear lubricant that also polishes and waterproofs.
- Garage Door and Gate Grease is a clean, white lubricant in an easy-to-use aerosol.
- Clean-Up multi-purpose cleaner easily removes dirt and grime from almost everything, from tiles to carpets.
- Opti-View and Hard Surface Cleaner is a powerful streak-free formula.



The new Home Care Kit is available at Builders Warehouse stores nationwide.

**i For more information**

Visit: [www.swifts.co.za](http://www.swifts.co.za)  
Tel: 011-827-5935

## Plaster not sticking?

It is no longer necessary to waste time hacking and chipping at smooth walls and substrates to create a key for plaster to bond to. Plasterkey by A-Shak is a universal water-based bonding aid that can be used on sand/cement plaster and gypsum.

### Features:

- Bonds plaster to smooth surfaces.
- Improves the non-structural bond of cement and gypsum plasters.
- Bonds to sound PVA surfaces.
- Easy to use.



Note that Plasterkey should not be added to gypsum-based cements. Instead, the product must be brushed onto the surface of the board before the gypsum plaster is applied.

**i For more information**

Visit: [www.ashak.co.za](http://www.ashak.co.za)  
Tel: 0861-127-425

## New mitre saw ticks all the boxes

Makita's new Slide Compound Mitre Saw (LS0815FL) offers the professional user a tool that is not only easier to transport, but also delivers good cutting capacity. The saw is fitted with a 216mm diameter saw blade and the motor gives 1 400W of power.

### Specifications and special features:

- Dimensions: 755 x 450 x 488mm (L x W x H)
- Weight: 14.1kg
- Maximum cross cutting width: 305mm
- Maximum depth: 65mm at 0°
- Seven positive mitre angle stops
- Electronic soft start and electric brake for safe operation
- Double sliding rails with linear ball bearings



The ability to angle and bevel the saw precisely before cutting into stock is what gives the sliding compound saw the versatility to accomplish tasks such as cross, mitre, bevel and compound cutting.

**i For more information**

Visit: [www.makita.co.za](http://www.makita.co.za)  
Tel: 011-878-2600

## Safer table saws are here

It is said that there is a table saw-related injury every nine minutes and as many as 10 amputations per day. Technology to prevent table saw amputations has been available overseas for some time and is now available in South Africa. The SawStop range of table saws comes with technology to prevent serious injury and amputations in the workshop.



How it works: The blade of the saw carries a small electrical signal, which is disturbed when the blade contacts skin because the human body is conductive. This change activates an aluminium brake, which springs into the blade, stopping it almost immediately (claimed at 5 milliseconds). At the same time, power to the motor is shut off. Both the blade and the brake cartridge can be changed in five minutes and, with any luck, you will still have all your fingers.

**i For more information**

Visit: [www.vermontsales.co.za](http://www.vermontsales.co.za)  
Tel: 011-314-7711



## Stylish garden lights

The latest EGLO outdoor range, distributed locally by Eurolux, will add functionality, style and security to any space. This Austrian range includes recessed wall and ground lights, wall lanterns, garden spikes, wall washers and much more.



### Some of the EGLO lighting options:

- The Roffia range has matching wall and post lights with an aluminium and white finish. The use of LED technology makes the light stronger while saving energy.
- Fontella lights up landscape features with its low, even light spread. It can be used to illuminate shrubs, plants or textured wall surfaces to silhouette special details.
- Fontella LED wall washers are perfect for feature lighting and for providing an amazing colour wash effect to the outside of buildings.
- Margo flush-mounted ceiling lights are finished in a modern stainless steel with a frosted white glass diffuser.
- Rigo is an outdoor recessed floor lamp designed to be embedded into a deck or outdoor stairway.

EGLO products are SABS approved and come with a two-year warranty.



### For more information

Visit [www.eurolux.co.za](http://www.eurolux.co.za)  
Tel: 021-528-8400

## Radio for DIY'ers

The GML 50 Professional radio has four speakers and an integrated subwoofer to deliver all-round sound on any job site. It is designed to withstand impact and can withstand falls as high as 3m. It is durable thanks to the spring-mounted aluminium frame, which doubles as dust and splash protection too.

### Specifications and special features:

- 50W power
- FM/AM radio and ten pre-sets
- MP3 playback
- Compatible with USB, SD, 2x aux-in and aux-out
- The unit is powered with Bosch 10.8V Li-ion batteries or the supplied mains adapter



### For more information

Visit [www.bosch.co.za](http://www.bosch.co.za)  
Tel: 011-651-9600

## Keyless accessory changes on multitools

Sometimes the hassle of changing an accessory on your multitool causes you to struggle on with what you are using. Dremel has developed several different mechanisms on mandrels, and within tools themselves, that make accessory changes faster and easier.



The Dremel EZ system allows users to change accessories quickly without screwdrivers or wrenches. The range includes the Dremel EZ SpeedClic, EZ Twist and the EZ Change. A range of accessories for jobs like cutting, grinding, polishing and sanding has been specially designed to complement tool-less changes.

The EZ Change system is a feature of the Dremel 4200 multitool and accessories are changed in three steps:

1. Turn the EZ Twist nose cap counterclockwise and remove the accessory.
2. Insert the new mandrel.
3. Fasten the accessory by twisting the nose cap clockwise.



### For more information

Visit: [www.dremel.com](http://www.dremel.com)  
Tel: 011-651-9600

## Combination flip over saw

Combination saws are a favourite among hobby woodworkers who don't have the space or money to invest in large machinery. The Toni Combination Mitre and Table Saw (TSF10i) gets the job done and is ideal for the DIY'er and small contractor for mitre and table saw applications. The machined aluminium base keeps the weight down and wheels on the base make it easy to move around.

### Specifications and special features:

- Dimensions: 500 x 540 x 488mm (L x W)
- Weight: 35KG
- Four mitre angle stops.
- Fully enclosed guard for operator safety
- Durable carbide-tipped 60 tooth blade
- Torsion resistant and sturdy design



### For more information

Visit: [www.newcopowertools.co.za](http://www.newcopowertools.co.za)  
Tel: 011-315-1504

## Looking for a treadle fretsaw

I am a pensioner and I would like assistance finding a second-hand treadle fretsaw machine, similar to the one in the picture below. I believe there may be a fellow woodworker out there who has one they don't use and are willing to sell. I enjoy scroll saw work and have been looking for something suitable for some time. I would like to use the fretsaw to make items that I can sell at our local flea market to make some extra income. Please can the magazine do some scroll saw related articles in the coming year? Your magazine is so helpful and I enjoy every article as well as all the useful hints and tips.

**WINNING LETTER**

*Ed replies:* We hope that publishing an image of the fretsaw will draw in some sellers (sellers can email [editorial@homehandyman.co.za](mailto:editorial@homehandyman.co.za) for John's details). Scroll saw work is something we have been looking into for some time now. We can assure you we will be talking fretsaws and hopefully feature some projects in 2016.

*John Webb, Sedgefield*



## Food trolley

I am elderly and do no DIY myself, but am interested in what others do. My son-in-law built me a very lightweight trolley on four casters. It is light and easy to manipulate, so now it is easy to carry my plate of food from the kitchen when before I used to struggle with the tray and a walking stick. There is even a bracket for my stick.

*Mrs Jerman (Gran Anne), Pennington*

## Winning letter

This month's winning letter comes from John Webb who wins a Makita DGA452 ZK Cordless Angle Grinder





# More on cordless angle grinders

My best wishes to you and all of *The Home Handyman* staff, keep up the good work. I have one request and an interesting observation. Firstly, for 2016, please get rid of that terrible photo of yourself on the editorial page and replace it with a better one!

Secondly, in the October 2015 issue of *The Home Handyman*, there was a letter from Dennis Timke. He identified the potential for cordless angle grinders to be used to burgle homes and he felt they should be banned as a consequence. In the following month's Voice Your Views, there was a letter from Peter Schneider from Makita in response. Peter said that many tools can be used to break into a property and many of these are easier, faster and quieter than a noisy grinder.

With this in mind, I took interest in an article published in the *Northcliff Melville Times* on 25 November 2015. It reported on a burglary that took place earlier in the month at Emmarentia Primary School. The Department of Education's spokesperson, Phumla Sekhonyane, commented, saying that an angle grinder was used to gain entry into the strong room. It was said that the burglars entered through the roof before removing the door from the strong room. Phumla said that R250 000's worth of IT goods were stolen.

Makes one think!

**Malcolm Cunningham, by email**

**Ed responds:** Hi Malcolm, nice hearing from you again, and I agree that a new photograph is needed. Evidently, you are a big reader and don't miss a thing. It would appear that the concern expressed by Dennis about the potential misuse of cordless angle grinders is a reality. Still, the same may have been achieved with alternative tools. Also, there isn't much use banning tools because another means would be devised, and it would always be possible to import tools.



## DIY'ers share inspiration

I just wanted to write and let you know how much I am enjoying *The Home Handyman* magazine, which I happened upon by chance recently while shopping. I liked the December 2015 issue so much that I had to write in. I am still picking up new and useful ideas and each page is loaded with information. Thanks for the inspiring editorial letter you wrote for the December issue.

Looking forward to that article about the 'pesky birds' – I love birds, but I would love them to leave me with some fruit and vegetables from my garden. At this stage, I plant and provide and the birds harvest everything. *The Home Handyman* is a magazine worth picking out from the magazine stands and investing in. It is on my list of things to read, review and use during 2016.

**Jacoba Du Plooy**

**Ed replies:** Hi Jacoba, thank you so much for your inspiring letter! I'm happy to hear that you found our magazine and have grown to love it in such a short time.

**WIN!**

**A Makita DUB182Z 18V Cordless Blower**

## Share your opinion

Send us your views, ideas and opinions addressed to *The Home Handyman*:

Email: [editorial@homehandyman.co.za](mailto:editorial@homehandyman.co.za)

Fax: 086 551 0749

By mail: PO Box 48, Cramerview, 2060

Letters may be edited for length and clarity



Please note: Winners' prizes may take up to six weeks for delivery once the issue is on the shelf. The prize sponsor sends out the prizes.



## HC Open Days

Hardware Centre is one of the oldest, most well-established specialty woodworking shops in the country. It regularly hosts HC Open Days at its branches in Johannesburg and Cape Town. In doing so, it hopes to attract newcomers and inform loyal customers about the latest technology in woodworking tools.

HC Open Days are supported by well-known woodworking ambassadors and local suppliers. At any given event visitors get to see experienced woodworkers demonstrating techniques like scroll sawing, cabinetry, turning, joinery, ripping and routing with some of the best tools around.

## Beware of the paint you buy

The South African Paint Manufacturers Association (SAPMA) has stated that it will not hesitate to take legal action against companies falsely claiming membership to the Association. SAPMA executive director Deryck Spence says that Permatex Wall and Roof Coatings is selling products bearing the SAPMA logo despite its membership being revoked earlier this year following complaints about a poor standard of service and operation. "Wondercoat Wall and Roof Coatings is doing the same and it has never been admitted as a member."

People should steer clear of these products if they want their paint to work as promised. "SAPMA members uphold a strict code of ethics and we simply cannot afford to have unscrupulous companies ruining the reputation and status of our members," says Deryck.

## Show Me How



Gloria Bastos, presenter of Show Me How

January will see the start of season 13 of *Show Me How* on The Home Channel DSTV. Presenter, and DIY enthusiast Gloria Bastos is back with new project ideas that are sure to inspire you. This season has a great line-up of guests who will be guiding you through a series of arts and crafts including woodworking. The show aims to promote creative hobbies and crafts to the aspirational viewers, and encourage them to become active crafters. The channel has partnered with Hobby-X, taking place in March, and will also be running live workshops for visitors and the *Show Me How* viewers.

**Time slots:** Tuesdays at 7.30pm; Wednesdays at 10.00pm; Thursdays at 11.30pm; Fridays at 03.30pm; Saturdays at 5pm and 12am; Sundays at 12pm and 9pm



# Toys for Charity 25th anniversary

The Witwatersrand Woodworkers Association Toys for Charity drive takes place at the end of November each year and in 2015 it was held at the Gereformeerde Kerk Randburg. "We had a good turnout, with 1 100 toys donated and R20 000 raised to support the continuity of the Association. The new venue was ideal and people were going to the bathroom to do nothing but admire the fixtures," says Alistair Brande, secretary of the Association.

The Toys for Charity drive asks woodworkers to donate as many wooden toys as they are able to make before the day of the event. As a reward, you get one entry into the raffle for every 10 toys you present on the day (special consideration being given to extraordinary toys). The Association collects the toys and hands them over to Westview Clinic, which distributes the toys to 65 child development crèches through its Project Hope campaign. Visitors can also contribute by buying tickets to enter the raffle.

Alistair says that in spite of tough trading conditions, the Association has had wonderful support from sponsors over the past few years. "The Witwatersrand Woodworkers Association would like to say an especially big thank you to everyone who donated toys and prizes."

The prestigious 'Builders Warehouse Toymaker of the Year' was won by Linton Lake.

**Any companies wanting to support the Witwatersrand Woodworkers Association Toys for Charity drive can contact Alistair on 079-895-8709**



▲ Toymaker of the year: Linton Lake



▲ The winning toy which was donated to Toys for Charity



The Witwatersrand Woodworkers Association would like to thank the listed donors for their support:

- Academy Brushware
- Androware
- Asax Agencies
- Austro Engineering
- Benray – DeWalt
- BMG Technologies (Gorilla Glue)
- Builders Warehouse
- Bulldog Abrasives
- CCL
- CGR Agencies
- French Engineering Works
- FIRST CUT
- Gedore Tools
- GPC Sales
- Hafele
- Hardware Centre
- Hitachi
- HP Will
- Ignite Charcoal
- Klingspor Abrasives
- Lasher Tools
- Maple Street Timbers
- Metabo Power Tools
- Mistry's Pine Furniture
- Mitco Tool Company
- Mr Woodturner
- Newco Power Tools – WoodStar
- Pepper Mills for Africa
- Permosseal
- Power Tool Repairs Cape Town
- Prosono International
- Qualichem
- Richem CC
- Robert Bosch
- Rutherford
- Saint Gobain Abrasives
- Sam's Creations
- Shield Chemicals
- Skillcraft Agencies
- Somta Tools
- Spectra Spray
- Sprayon
- Stanley B&D
- Stevens & Co
- Strand Hardware
- The Home Handyman magazine
- Toolquip & Allied
- Topline
- Triton Leo
- Unique Welding Supplies
- Vermont Sales
- Woodoc

## Repairing broken roof tiles in situ

I have had a problem with the cowl on the top of my metal chimney stack making a terrible noise when the Cape South-Easter blows. This has meant a few trips up and across my tiled roof, at an age when my balance is not what it once was, causing me to step off the roof capping and onto the roof tiles. This broke the bottom corners of about 10 tiles. I want to know if I must replace the tiles or if there is a product that adheres and seals the broken joints.

*Archie Taggart, by email*

**Ed replies:** We had a similar query recently so it seems to be a common problem. Balancing on the capping is like walking on a tight rope, never mind the South-Easter. Managing director at Coverland, Willem Grove says it is best to walk in the middle of the lower end of the tile instead.

Broken roof tiles can be fixed with A Shak RoofFix. This is a flexible compound with excellent adhesion properties and has the capacity to repair the broken tiles. It can also be used to fill wall cracks or to patch chipped wall plaster like you get on corners of a wall. In addition, roof paint can be added to the product or it can be painted over later.

*For further information visit [www.ashak.co.za](http://www.ashak.co.za) or call 086-112-7425.*



## Making solid wood stand out

My son and I are avid DIY'ers and have just tackled a project of hanging some lights off a rough piece of timber purchased at a saw mill. What is the best way to treat the wood to protect the wood but keep the natural beauty, and how would I hang this from the ceiling?

*Brendan Burmeister, Pinetown*

**WINNING QUERY**

**Ed replies:** Hi Brendan, thank you for your mail and the excellent picture. That really is a beautiful piece of timber. Since it is indoors and will not be exposed to the weather, a sealer, to protect the wood, isn't necessary. Something like a tung oil, or similar, will stabilise and enhance the natural beauty of the wood. To hang it from the ceiling you will need toggle bolts. You should be able to find a female rod to fit the screw, which will extend downwards and through the wood. Another screw will be inserted from below to secure the timber to the rod.

## Painting a cast iron bathtub



I have an old cast iron bathtub that I installed into a flat for our guests on the farm. It is a pale pink colour and in some places the paint has chipped away. I want to respray the tub but the spray comes off easily. I asked for advice at a paint shop near us but they said it would be cheaper to put in a modern tub. But what is better than a warm bath in a cast iron tub? The price they gave me was R700 per 200ml of spray. How much would I use? Is there another paint that I can use that doesn't cost as much?

*Louis Mulder, by email*

**Ed responds:** Cast iron tub designs are back in fashion and replacing it with a similar model will likely to cost more than renewing the one you have. That is quite expensive for a 200ml can of spray paint but it is a specialised product. The 200ml spray may well do the job but will require careful application and technique. We believe that a two-part epoxy paint is better suited. It is easy to apply and there is no chance of running out of product.

Russell Malcolm from Spraymate says Rust-Oleum Tub & Tile Refreshing Kit produces exceptional results when applied correctly using a foam roller. It is a two-part mix and includes the base colour and a catalyst, which are mixed 1:1. The full range of Rust-Oleum products is available at most Builders Warehouse branches countrywide.



# Lime deposits on windows and brickwork

We have a borehole that we have connected to our irrigation system. The water sprays against the glass windows and a brick wall. Over the years a deposit of lime has built up on both surfaces. How can we clean the deposit off the glass and is there something we can do to restore/refurbish the brickwork? See photograph on the right.

*Albert Bester, by email*

**Ed responds:** As you may know the deposit is caused by hard water conditions – high ratios of magnesium and calcium are common throughout South Africa and this causes many home maintenance issues. These deposits are alkali and may be removed with an acidic solution or abrasive compound and a polisher. They can be almost impossible to remove and in other instances a solution of half water, half vinegar may work. If that doesn't work you can try a few grams of bicarbonate of soda mixed with water. Another DIY alternative is to try toothpaste and an automotive polisher. There are glass cleaners and sealers but they tend to be expensive and are not commonly available. Glass sealers can be used to prevent the build-up but regularly cleaning the window will work just as well.

As for the brickwork, Corobrik suggests the use of a mortar cleaner (normally used to remove excess mortar). Be careful, though, not to damage the surface of the bricks.

## Step-by-step brick cleaning

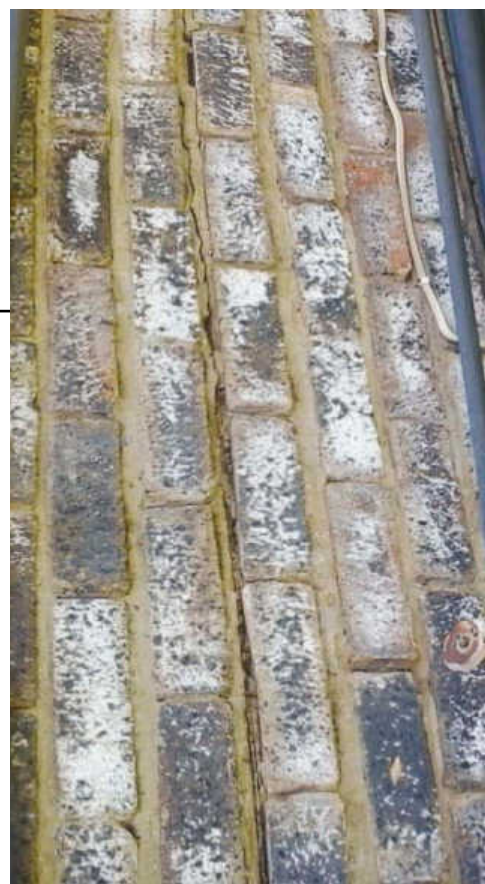
**Step 1:** Remove large pieces of mortar with a wooden or nylon scraper where possible.

**Step 2:** Wet the brickwork with water, starting from the top.

**Step 3:** Wash the wall with a diluted solution of mortar cleaner while adhering to the manufacturer's instructions. Start at the top of the wall and use a nylon brush.

**Step 4:** After scrubbing, the wall must be rinsed immediately to remove any acidic residue.

**Step 5:** Steps 1 – 4 can be repeated after the brickwork has dried if necessary.



## Winning query

This month's winning query comes from Brendan Burmeister who wins a Skil/Dremel hamper



**WIN!**

**A Triton SuperJaws from Vermont**

## Ask our experts

Send us your DIY queries and you could win!

Send your query to:  
The Home Handyman DIY Queries,  
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Make use of this checklist to ensure that buying your dream home doesn't become a nightmare

# A homebuyer's checklist

Purchasing a property may be the largest financial investment you will ever make. Impulse often comes into play and you may be tempted to put forward an offer for the first property within your price range. When viewing homes, or rather the home you would like to purchase, ensure that it is free from the common defects explained in this article.

"Although it is the appearance of a home that buyers often fall in love with, there is sometimes more to a home than meets the eye," says Adrian Goslett, CEO of RE/MAX Southern Africa. Adrian says the fundamentals of purchasing a property never change. It is important to take your time and when making a decision. "While aesthetic appeal plays a role in a decision, other more crucial elements need to be considered such as the structural components of the property. Rectifying severe structural defects will be a costly affair that impacts on the home's potential return on investment," says Adrian.

The Consumer Protection Act specifies that the buyer has a right to be fully informed



By Aarifah Nosarka



Foundation cracks move along a horizontal plane

of all known defects of a home the buyer wants to purchase. He says it is worthwhile for a buyer to have the home inspected for hard-to-detect (latent) defects, which may have been overlooked by the seller.

"There is always the chance that some defects may have been unintentionally missed or are simply unknown to the seller. These problems will not have been disclosed in the sale agreement and it is in the buyer's best interests to have the home inspected by a professional – a small price to pay considering the size of the investment," he says.





## Five potential defects to look out for

### Cracks in the foundation walls

While this may sound like it is fairly easy to spot, cracks can be hidden by layers of plaster and paint. “Not every crack will mean that there is a major defect; in fact, a fair number will be of little or no significance. However, some cracks could indicate structural damage that will be extremely costly to fix. In some cases, cracks occur in the walls when the foundation of the home has shifted. If this is what has happened, the crack will move along a

## What else to look for

- Check to see that all stove plates are functional by switching them on.
- Look under the sink to ensure no pipes have leaked and there is no resultant internal water damage.
- Ensure all the cupboards open and close in the kitchen, bedrooms and bathrooms.
- Flush the toilet and open and close all taps to check that they work.
- Take a look at whether the floor level is in sound condition.
- Make sure that the shower recess is free from leaks.

horizontal plane, which is of more concern than a vertical crack,” Adrian explains. He says the width of the crack is another consideration in determining the severity of the issue. Vertical, narrow cracks are often not a sign of a foundational shift, while wide cracks should definitely be assessed. The burning question is whether the cracked wall can continue to provide support to the structure or whether it needs to be completely replaced –which will cost far more than repair.

### Roof damage

Yellowing marks on the ceiling are normally an indication that the roof is leaking and needs repairing. If not repaired, this could result in other problems forming such as structural damage or damp in the walls. Added to this, exposure to moisture will rot the wooden components inside the roof’s structure, which could lead to collapse. If it is merely a matter of broken or missing tiles, these can be easily replaced, but structural damage will cost a lot to replace completely.

### Foundation drainage

There must be sufficient water drainage around the exterior of the home to avoid water pooling or damp problems in the low lying areas of the property. Not only can poor drainage cause mould and rot, but persistent water intrusion can compromise the structure of the foundation and be a very expensive problem to rectify. Drainage systems should be properly graded to better channel water away from the home and foundation.

### Faulty electrical system

Legislation requires the homeowner to be in possession of a valid Electrical Certificate of Compliance (ECOC), which ensures that electrical work and installations are safe and meet the required regulations of the South African National Standards. It is important to ensure that the wiring installations in the home match those on the certificate and that they have been maintained throughout the period stipulated on the certificate. Adrian says to be wary of amateur repairs that have been completed by the homeowner. “These will not be covered on the certificate and could result in a faulty electrical system.”

### Plumbing problems

Plumbing issues are often difficult to detect or check as the problem may be underground. Common defects include outdated piping materials and faulty fixtures. “While replacing a fixture is a simple repair, replacing an entire plumbing system isn’t. When viewing a home, buyers should look under the sinks for pipes that are leaking or in need of repairs, although it is best to have the plumbing system inspected by a professional plumber.”

Taking time to ensure the property is in good order may require some initial work on the buyer’s part. “The time and effort will pay off in the long run by providing the buyer with an appreciating asset that grows in value.” ✕

Source: [www.remax.co.za](http://www.remax.co.za)





# Home maintenance guide

Following a routine of assessments and repairs in your home will preserve its beauty and prevent large, unexpected expenses later on

By Aarifah Nosarka

Homes around the world appreciate in value on their own, but to maintain and build value requires a proactive and systematic approach. Avoiding major operational malfunctions or complete failures can be avoided by carrying out minor home maintenance chores.

Divisional manager of Renprop Residential Resales, Debbie Justus-Ferns, says it makes sense for homeowners

to continually maintain and improve their properties in order to protect their investments and add value. "Homeowners can also increase their return on investment through keeping a well-maintained home," she says.

Home maintenance should be kept up year round, with some areas requiring seasonal maintenance. Here we cover the areas around your home where scheduled maintenance is important.



Ensure that all exterior lighting is functional



## Windows and doors

Michael Berg, national sales and marketing manager at Den Braven, says that door and window maintenance should be carried out during drier seasons to avoid wet conditions. "Sealants require a dry and clean surface to adhere and cure correctly. Ideally, maintenance should be done once a year if it is required," he says.

He explains that maintenance periods largely depend on the type of exposure the windows, doors and frames endure. Take into consideration whether windows and doors are subjected to direct sunlight, water contact or temperature variances.

Michael says it is essential to identify what needs to be done before carrying out any maintenance work. He says, "If windows, doors or frames are kept together by old, cracked sealants, cement or grouting, they need to be removed. The substrates should be cleaned away and replaced with a suitable sealant for the type of frame or application."

Michael suggests sanding, priming and repainting steel window frames where putty replacement is necessary. "Maintenance work involves weather sealing, putty replacement, perimeter sealing and joint sealing." He advises the use of reputable, quality products during window and door maintenance. Products should also be suitable for the intended application and substrates.



### Sealant tips

- Always use a good cartridge applicator, as sealant viscosities may vary.
- Use masking tape to protect areas from mess as the removal of the sealant after may be a difficult task.
- Always wear proper protective equipment, for example safety glasses, gloves and overcoats.
- Read the instructions on the cartridges and technical datasheets before commencing the project.



### Electrical

Louis Pretorius, the Highveld regional director of the Electrical Contractors Association (ECA) says the only electrical maintenance that can be done by a homeowner is to check that the home's earth leakage is still operational.

"This is done by pressing the trip button, normally a small square push button located on the lower half of the distribution board, at least once a month. If this unit does not work, you need to get a registered electrical contractor to investigate and correct the problem." He says that all other electrical work should be carried out by a qualified electrical contractor.

**Check that your home's earth leakage is operational by pressing the trip button**

### Security

When your family's safety is concerned, prevention is certainly better than cure. Let's explore what security maintenance warrants:

- Conduct weekly perimeter checks – take a walk around your residence to inspect that locks on your doors and windows are fully functional. It may not seem vital, but poorly maintained window and door frames make for an easier breach in entry point.
- Ensure that all exterior lighting is functional. It is advisable to check lighting on a monthly basis and readjust lights so they are aimed or positioned correctly. This will also maximise the effectiveness of the lights outside your home.

- Sensors also need attending to, merely to ensure they are still in the places they are meant to be. Battery-powered sensors require occasional changes and replacement of new batteries, just as they do testing.
- If you have cameras as a security measure on your property, inspect them on a weekly, if not daily, basis to make sure they have not been vandalised, have power and aim where you intend them to. Check monitoring and recording devices to ensure that they are functioning as expected.
- It helps to have an annual inspection by a qualified technician. Technicians will inspect the wiring, check the various components, power supplies and update software if necessary.

**If you have security cameras on your property, inspect them regularly to ensure that they are working**

## Plumbing

National training manager at Cobra and ISCA taps, Patrick Gordon, offers some advice on plumbing fixtures that must be maintained:

### Geysers

According to Patrick, the most dangerous fixture is the geyser, for which maintenance is required to prevent injury to oneself and property as well as to preserve energy. "The geyser is made up of many components that need regular maintenance. Depending on the quality of the water, the geyser in your home should be decommissioned every two years and also needs to be serviced." Patrick explains what should happen during servicing: "The lime scale build-up in the cylinder needs to be cleaned out and the element and thermostat pocket descaled. The sacrificial anode needs to be inspected and replaced if very eroded." He highlights the importance of homeowners taking extra corrective action so that installation is in line with new specifications. Installation specifications can be found online.

### Taps and mixers

Note that if a leaking tap is not attended to as soon as it is noticed, the whole unit may need to be replaced. A leaking faucet wastes up to 90 litres of water a day.

**Tap sealing washers should be inspected and replaced on an annual basis or when necessary**

### Brief checklist for potential plumbing problems

- Turn on all of the faucets in your home to see if there is any water coming out of the handles and valves.
- Look for signs of corrosion – you will see green stains around brass and copper fittings and on steel, and orange or yellow stains, which are indicative of corrosion. Corroded pipes can cause leaks and bad pipe connections if not corrected.
- Observe drainage in the shower, sink and bathtub for the speed that water drains at. Slow drainage usually indicates a clog in the drain or a blocked vent pipe. Your drains should have a full swirl when draining.
- Check the flushing handle and inside parts of the toilet. Flush each toilet to make sure that it is flushing properly. Check the parts inside the tank of the toilet to see if any parts are broken, rusted or missing. Make sure the toilet water does not continue to run after flushing and make sure there is no sign of water on the floor around the toilet.

Addressing these problems on a regular basis can help prevent the problems from worsening and save you money.

Patrick recommends that sealing washers be inspected and replaced on an annual basis or when necessary. Sealing washers are sold at all hardware stores under different brands. Patrick says, "The homeowner should rather replace damaged seals with ones supplied by the manufacturer of the tap. By using the correct seals the lifespan of the unit will be extended." He says that seat units may be damaged over time but can be repaired by re-cutting the brass seating surface. "Ensure that a good quality re-seating tool is used so that the main seat is finished with a smooth surface."

### Toilet cistern

Patrick warns that one of the biggest water-wasting culprits is toilet cisterns. With water restrictions in place, this is a leak that should be attended to immediately. "The problem is that most homeowners don't want their hands near a toilet."

### How to check for causes of leaks

- The filler valve needs to be adjusted so that the water level is below the internal overflow level.
- If the cistern is over-filled the excess water will flow via the internal overflow pipe to the toilet bowl.
- The flush valve sealing washer should be checked for wear and distortion. If the seal is not making proper contact all the way around, the valve cannot prevent the water from leaking into the toilet bowl.
- A quick way to check if your cistern is leaking is to place some bright food colouring in the cistern, and even the smallest leaks will show up as lines in the toilet bowl. You can also use tissue paper to test if the inside of the bowl is dry or not.

Patrick concludes: "Remember, a stitch in time saves nine."



## Paint maintenance

To save on an extensive, let alone more expensive, job, it is best to repair and repaint as soon as you notice paint starting to crack, blister or peel.

Senior technical service consultant at Prominent Paints, Pieter Greef, says it is devastating to watch the effort that went into painting a house go to waste. "It is a big and back-breaking job and, if not tackled properly, can also break the bank."

Pieter says that sometimes even the best preparation results in cracking and peeling paint within a year. The causes for this could vary from the wrong product, to old paint, painting over a dirty surface, inadequate surface preparation and even the weather. "Like human relationships, incompatibility between paint layers can also be a problem: a surface finished with alkyd or oil paint must be treated with primer before being covered with latex or acrylic paint to avoid peeling. Some wood varieties can't be painted either."

Pieter says that most, if not all, exterior paint problems are correctable. To avoid an epic paint fail, identify all trouble spots before priming and painting, ensuring that potential paint disasters become a DIY showpiece instead.



### Painting tips!

- To prevent paint spilling onto the floor when removing excess paint from the paintbrush, place a paper plate under the paint tin.
- It is important to read the information on the container to ensure that the correct application method and the recoating time between coats are adhered to.

## Paint like a pro

- Always mix the paint thoroughly with a flat paddle before pouring into the paint tray.
- If working with different paint colours, slip the paint tray into a plastic bag and pour the paint onto the bag. Simply remove the bag and pour the paint into the clean tray when a colour change is required.
- Never dilute paint to achieve more coverage. This only compromises quality and lowers adhesion strength.
- Before painting, always wash the roller in clean water to remove traces of fluff. Spin dry the roller to remove excess water, then hang up to dry thoroughly.
- When applying paint, cut around cornices, ceilings, skirtings and corners first, then fill in with a roller.
- Adhere to drying times indicated on the paint container before applying a subsequent coat. This will ensure proper coverage and a quality, professional finish.





## Gutters

Gutters systems are designed to collect and carry water away from your home, preventing many home repair issues. When they fail, gutters can deposit gallons of water near your home's foundation, causing water to leak into living areas of the home.

The dry season is the perfect time to evaluate your gutter for broken sections, possible rusting, blockages and leaks. Even with gutter leaf protection, airborne debris and seeds can still enter the gutter system, so it is advisable to clean out your gutters at least twice a year.

### How to evaluate your gutters

- Do a gutter test by using a hosepipe to flush water through the system. It is better to use a jet nozzle or pressure washer on the hosepipe. Keep an eye on leaking corners and downspouts. If the water does not run down the pipe freely, it may be blocked and will hamper water flow. Use a stiff, lengthy wire to get through the compact debris that has accumulated. Once that is done, use the hose to work the debris out of the gutter system.
- If water has collected in gullies, this means that the slope is either wrong or the gutter has sagged. Take a look at

what holds the gutter in place and if you find it to be a defective or broken bracket, remove and replace it. This is a quick way to repair a sagging gutter.

- After heavy rainfall, look for depressions in the ground below the gutter which will indicate gaps or cracks in the gutter.
- If your metal or aluminium gutter has been painted and is in need of a touch-up, start by sanding it down, paint it with a metal primer and, lastly, coat using an oil-based exterior paint. There is no need to paint plastic gutters.

### How to fix gaps between sections or cracks in the gullies

**Step 1:** Start by cleaning the area around the hole; use a wire brush or steel wool to scrub it down.

**Step 2:** Apply rust remover to protect the gutter from rusting.

**Step 3:** Use a suitable waterproofing compound to seal the crack. If there are larger holes to be repaired, these should be patched before sealing. You can use flashing or waterproofing tape to repair this. To ensure a tough seal, overcoat with waterproofing compound. Note that joins should be properly sealed.



It is advisable to clean out your gutters at least twice a year



## Roofs

Sharl Bennie from Hilton Properties says routine inspections should be carried out on roofs by experts. Sometimes internal rafters of beams may be deteriorating causing issues that do not present themselves on the surface of the roof. Therefore the inspection undertaken will vary depending on the type of roof you have.

There are however some checks that the homeowner can do. With any luck you may be able to detect a worsening condition before it becomes a major issue.

### Visual inspection of roofs

- For concrete roofs, look for deterioration of the waterproofing.
- On metal roofs, look for rust, loose sheeting, missing screws, damaged flashings and the general condition of the roof.
- If you have a tiled roof look for broken tiles, blocked valleys, ridging tiles and faded roof coatings.

“Roof maintenance is best done during the dry season but can be done on any dry day, any time of the year,” says Sharl.



On metal roofs, look for rust, loose sheeting, missing screws and damaged flashings



Condensation damp stems from excessive moisture in the home

## Damp

There are three types of damp to be wary of. These are:

### Penetrating damp

This is caused by defects in the building or plumbing system, where water has been able to enter the property. Look out for water marks on walls, which also provide clues as to where it is possibly leaking through. To solve the penetrating damp problem, check the pipes, gutters and drainage system for blockages. Removing the blockage could solve the issue. Replace old gutters and repair wall and window cracks. A common cause of this type of damp is loose roof slates - secure or replacing a slate is a solution.

### Rising damp

This unpleasant, destructive problem should be dealt with as soon as it is

discovered. It usually occurs in houses without a damp-proof course or when the course fails to work properly. It ruins finishes, leaves a musty smell and creates a clammy atmosphere. The solution is to have a damp-proof course (DPC) installed.

### Condensation damp

This stems from excessive moisture inside a home. This will happen when the home has insufficient ventilation. It will result in the formation of mould with a musty smell surrounding the area. Using a dehumidifier may assist as will an extractor fan in rooms with a lot of steam.

### Treating damp

Sharl Bennie says the treatment of damp can be done at any time of the year but external work should be done during dry periods because very few products adhere to wet walls. ✂





# Fundamentals of solid timber

By Gareth Greathead

After some practice with manufactured boards like Masonite, MDF and plywood, it may be time to look at some solid timbers

**N**o manufactured board can match the natural beauty of solid wood. There are hundreds of wood species which range in price, characteristics and strengths. The choice you make will depend on the type of project you are taking on, your personal preference, availability and cost.

Unlike manufactured board, solid timber has imperfections, like knots and it can warp, swell, splinter and crack. When spending more money it is important to select the best wood for your project and to know what to look for to get the best value for your money. The best wood with

the fewest imperfections will be priced accordingly. The tighter and more parallel the grain, the stronger the structural strength making it ideal for things like chair legs. Some of the choices you need to make include indigenous versus exotic, hardwood versus softwood, sapwood versus heartwood and green wood versus seasoned wood.

## Indigenous versus exotic

When visiting a timber yard, the first thing you are likely to notice is the division of species into indigenous and exotic varieties. In South Africa we are blessed with many different indigenous woods. We also have many species that were imported by past settlers and have become commonplace in the country. For example, Johannesburg is considered to be the world's largest manmade forest largely thanks to the Jacaranda tree that is native to the tropical and subtropical regions of Central America, South America, Cuba, Hispaniola, Jamaica and the Bahamas.

John Young was a game ranger and developed an unbelievable knowledge of indigenous and exotic woods. Today he owns Young Woodworking & Antique Restoration. "The first thing you are likely to consider when selecting a piece of timber is the price. If you are looking for wild olive, you can expect to pay in excess of R1 000 for a usable piece and the same is true for many other exotic woods. Local varieties often offer excellent value for money and I believe we have some of the best timbers in the world," says John.



The exotic wild olive is an expensive but beautiful timber



### ▼ Handcrafted Rhodesian teak pens



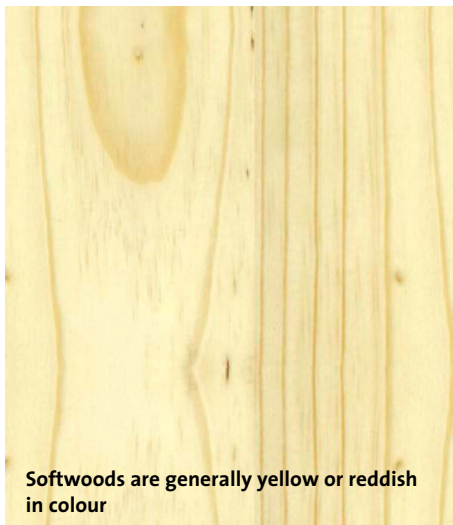
Indigenous species are easily accessible, affordable, striking and workable. "In South Africa we have five different species of meranti to choose from with some offering beautiful shades of 'red'. My favourite wood has to be Rhodesian teak because of its honesty – it cuts well and produces good results when doing any kind of joinery."

Common pine is one of the best solid timbers to practise with. Its characteristics encourage good workshop practice because your tools need to be sharp to achieve a clean cut. "Many woodworkers disregard pine but, again, this wood has much value and after working can be made to look as good as the best. Then there is saligna and tamboti and many other species that can be found without breaking the bank."

Before purchasing a piece of timber, local or exotic, it is a good idea to study the characteristics of the wood. This will give you a better idea about where it is best used as well as its workability, density, resilience and other characteristics. This information can be found on the websites of major timber merchants around the country.

### Hardwood versus softwood

Although hardwoods are generally harder and denser than softwoods, this is not how woods are identified. For example, balsa



Softwoods are generally yellow or reddish in colour

is a hardwood but is one of the lightest and least dense woods around. Distinction between the two relates to the trees' reproductive cycles and the structure of the wood.

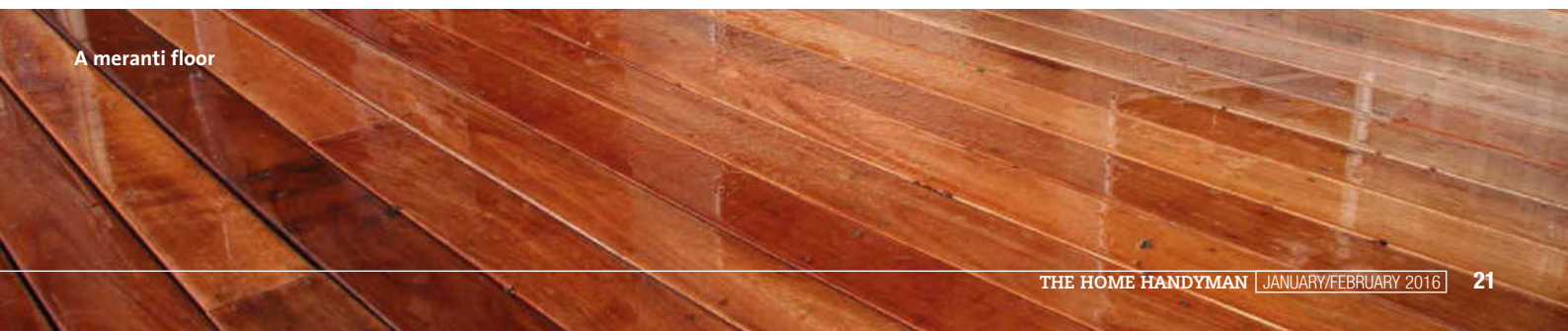
Pores are visible on the surface of hardwoods and these allow water to travel from the roots to the upper portions of the tree. This contributes to the wood's grain pattern and also its fire resistance. Softwoods transport water through straight, linear tubes called tracheids. These transport water and produce sap, giving strength to the stem. Hardwoods come in a wider variety of tones, from brown to dark red and even white, while softwoods are generally yellow or reddish in colour.



Hardwood trees, like the oak, grow more slowly, making this wood more expensive, and the wood is generally denser

Hardwood comes from angiosperms or flowering plants, such as oak, maple, beech, mahogany, teak, ash, balsa, birch, cherry or walnut, which are not monocots. Examples of fruits include an acorn or apple and the seeds inside are distributed primarily by animals. Hardwood trees grow more slowly, making this wood more expensive, and the wood is generally denser. Hardwoods are preferred in fine furniture-making or where it will be exposed to the elements or abrasion, like flooring. Interestingly, hardwood offers more fire resistance than softwoods.

A meranti floor



Softwood comes from gymnosperms, which are normally evergreen, like pine trees. Pine cones fall from the tree and, once dry, the wind transports the seeds. Softwoods have a wide variety of applications and are used for anything from furniture to structural components like windows, doors and rafters. Examples include cedar, Douglas fir, pine and redwood. These trees are generally faster-growing, have a wider distribution and are usually cheaper as a result.

### Sapwood versus heartwood

Sapwood is the living, outermost portion of a woody stem or branch, while the heartwood is the inner wood, which comprises the majority of the cross section. In many instances the heartwood portion of the tree is darker than the sapwood, but not always. The divide between heartwood and softwood varies between species and prevailing environmental conditions. For example, tamboti has a wider band of sapwood than is normally the case.



When ripped the combination of heartwood and sapwood can make for some interesting pieces. This will one day be a shelf

The entire stem of young trees consists of sapwood covered by a harder layer of cellulose that eventually becomes bark. This layer is pushed inwards with annual growth and fresh wood cells develop under the bark. With favourable conditions, more cells are produced, leading to a greater girth of the stem or trunk.

The sapwood transports water and dissolved mineral salts from the roots and the crown of the tree. As the sapwood ages,

it dies and becomes heartwood but retains its structure and adds needed support to the stem. This is the section of the crosscut that is normally darker and creates wood with striking colours and grain variations. Both in nature and in woodworking, the heartwood portion of the tree is the most durable and resistant to weathering and attack by insects.

Faster-growing trees usually have a larger band of sapwood containing moisture. Stabilisation of this wood is more difficult because it tends to shrink and move when dried. It is also more susceptible to decay and staining by fungi.

### Seasoned versus unseasoned wood

Wood is a sponge-like material made of cells and fibres that swell and shrink depending on the temperature and moisture in the surrounding air, although to different extents in different directions. To minimise warping it is important to acclimate and store wood correctly. Even when buying seasoned wood, it is best practice to store the wood at the destined location some time before cutting and assembly.

Green wood is wood that comes from a tree that has been cut down recently and still has a high moisture content. In nature, wood from fallen trees become seasoned



### Tip!

You can season a piece of wood at home by cutting it into metre sections and covering the exposed cross grain with a wax.



Here the crosscut on the left is green and the one on the right seasoned wood – the cracks in the seasoned wood formed during drying



## Solid timber pros and cons

### Advantages

- It is the most aesthetically pleasing type of timber.
- There is a vast amount of species from which to choose.
- It is suitable for all woodworking joints.
- It is long-lasting.
- There is a range of colours, textures and grains available.
- It takes adhesives and finishes well.

### Disadvantages

- Can be expensive.
- Can be difficult to find the timber you are after.
- Has natural defects, such as knots.
- Can warp, shrink, twist or swell.

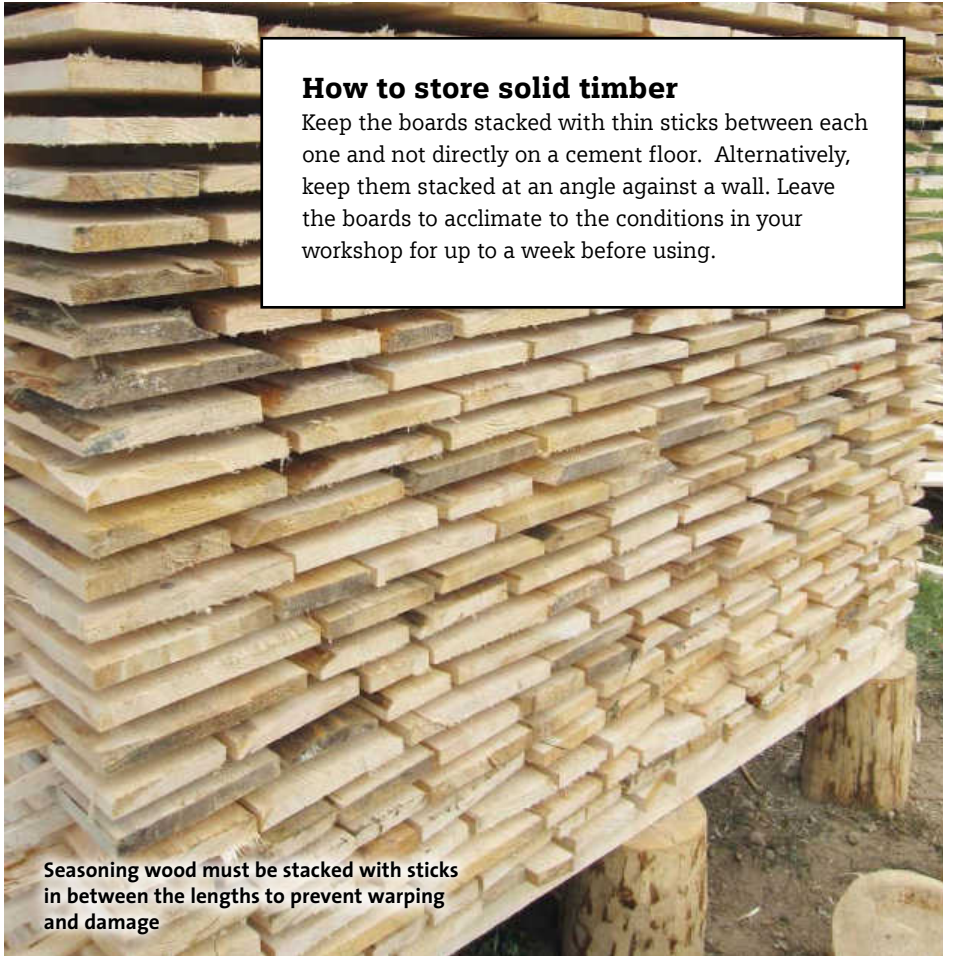
naturally with exposure to heat, but in most cases wood sold through merchants would have been kiln-dried. Green wood is considered to have a 100% moisture content, as opposed to seasoned wood, which is considered to have dried to less than 20% moisture.

Green lumber presents its own characteristics as well. Some species of wood are better assembled green because the wood splits less. Other species shrink excessively, leaving voids between the individual pieces when allowed to dry.

Case hardening describes lumber or timber that has been dried too rapidly. Wood initially dries from the shell (surface) and once this shell has dried it will 'set' and resist shrinkage. At the same time the core of the wood maintains a higher moisture content. The core will eventually begin to dry and shrink but the shell resists this movement. This results in a phenomenon known as case hardening and wood may warp considerably during sawing. ✂

### How to store solid timber

Keep the boards stacked with thin sticks between each one and not directly on a cement floor. Alternatively, keep them stacked at an angle against a wall. Leave the boards to acclimate to the conditions in your workshop for up to a week before using.



Seasoning wood must be stacked with sticks in between the lengths to prevent warping and damage





# A fascinating indigenous tree

South Africa has some of the best timber in the world and the leadwood tree has to be one of the most beautiful and interesting trees in the world

The leadwood, *Combretum Imberbe* (hairless climbing plant), despite the un-inspirational name, is one of Africa's largest trees, reaching heights of up to 20m. It is found in the southern parts of South Africa and as far up as northern Tanzania.

Leadwood trees are long lived but slow growing and it's believed that some of the leadwood trees in the Sabi Sabi Game Reserve are a thousand years old. Even when leadwood trees die the upright structure will remain for many years to come.

The exterior of the tree is a distinct pale grey colour and even the leaves have a greyish tint. The upper reaches of the tree are wide and feature fragrant yellow flowers and fruit. Many animals including elephant, giraffe, kudu and impala are known to frequent the tree.

## The timber

The tree produces a dense hardwood with a dry weight of 200kg per cubic metre. This

makes it one of the only woods heavier than water, causing it to sink in water. The extreme density also makes it almost impervious to attack by borer beetles and fungus.

Woodworkers will appreciate the rich brown, almost black, colour and tight grain pattern. The beauty and strength of this wood has led to unsustainable over-exploitation. Today the leadwood tree is protected and responsible timber merchants only sell pieces that have fallen from trees naturally.

## A tree of cultural significance

- The Afrikaans name for the tree is *hardekool* (hard coal), a name earned because the wood can take days to burn out when used as firewood. When the fire has burnt out, the ash, with its high lime content, can be used as toothpaste.
- After a bush fire tribes people collect the ash from burnt trees and mix it with water to make a paste that is used to paint kraals, walls and shelters.
- Bushmen use the gummy sap from the tree as a food supplement.
- The Ovambo people from Namibia never pass a leadwood without paying respect to it, believing that the tree represents the great ancestor of all people and animals.
- Inhaling the smoke from the burning wood is an ancient remedy for curing coughs and colds. The smoke from burning the leaves is thought to offer a similar cure, as is an infusion made from the flowers. Finally, leadwood bark is used as a treatment for bilharzia, and the roots as a cure for infertility. ✕





# BRIGHT IDEAS

Readers share their time-saving, space-saving or innovative ideas

## Improvisation gets the job done

WINNING LETTER

Most plumbing repairs and additions require the incoming water line to be shut off. This means that plumbing repairs can't wait another day because the family would like to shower in the morning.

I experienced this problem while doing some renovations on my house. The existing galvanised pipes were replaced with copper and I ran out of PTFE tape for the copper fittings. It was well into the evening and all hardware stores were closed. I certainly did not want to delay the task, and after unfruitful calls to friends, I had to improvise.

After I had turned a wooden spoon into a paint mixer earlier, the missus was tracking my movements and warned me to stay out of the kitchen. Unfortunately, my idea needed another item from the kitchen – Glad Wrap. I found that cutting thin strips of the Glad Wrap and applying it to the thread on the copper fitting actually worked better than the PTFE tape as it offered more elasticity and seemed to seal well. I completed my task that evening and was proved right after opening the water supply and checking for leaks.

*David Dawson*

## Reusable sanding blocks

This is likely something many people already do, but it may be worth sharing anyway. I don't like the feel of or grip on standard rubber sandpaper blocks. My solution is to use pieces of MDF with various grit sandpaper stuck onto the surface with wood glue before clamping them between two boards. This will give you the freedom to create unlimited shapes and you can glue one sandpaper over the other when it becomes clogged or worn.

*Dev Naidoo*



## Colour coded dust bag

I was doing some sanding with my mouse sander inside my home and it didn't come with a dust bag. I used it for some time without a bag before realising a sunglasses bag would work. Sunglasses bags are made from a variety of materials and it's important to select one that will allow air to escape through the bag. It requires absolutely no modification because the tie string can be used to tie the bag to the dust port. The great thing is that the sunglasses bag I used matches the colour of the sander.

*Kyle Fourie*



Congratulations to David Dawson who wins a Souber Tool Lock Morticer from Vermont

WIN!

## Share your ideas!

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# Make a garden lounger

Upcycling, the term for new ways of using old things, is one way to save money on your DIY projects. *Clifford Roberts* and woodworker *Andries Eyegelaar* show you how they converted old curtain pelmets into fancy Adirondack-style chairs

We recently moved into a new house and revamped the garden, but there has always been one thing missing – a set of loungers. After scouting the garden furniture stores, we arrived at our preferred style.

The Adirondack chair's fan-shaped backrest and wide armrests are typical, and it regularly features in DIY projects. It is named after the eponymous American mountain range where it was first conceived. Apparently, it was around 1903 that Thomas Lee designed the chair for his holiday home and made it using only 11 planks.

Ideally, you want to make two because, after all, lounging is always better when you have company.

## A few things to consider before you start:

- The chair should be made with a weather resistant hardwood if possible. We had meranti at our disposal, which is hardwearing, good looking and, as a result, more pricy too. But it will be worth it.



## Tools & materials

- Router
- Drill/ cordless driver
- Sander
- Jigsaw
- A saw, ideally an electric one
- Drill
- Chisel
- Pencil and square ruler
- Four g-clamps
- Thirty 4mm and thirty 60mm chipboard screws



The template for the front supports of the armrest can be drawn freehand, as long as they correspond to each other



## Cutting list

Our chair comprised 32 pieces, including the small blocks that support the armrests:

- Seven backrest planks.
- Nine seat planks.
- The length of the two seat frames, each 940mm long. In our shape, it was 120mm at its widest point and 75mm at its narrowest.
- Two back leg planks, 75mm wide and with a sloped top edge – 670mm at its highest length and 640 at the other. The front legs are 540mm high.
- The two backrest supports measure 515mm, the same as each seat plank.
- The armrests measure 760mm in length and 130mm at their widest point in front.

- The wood will have to be sealed with an outdoor sealer or painted to protect it from the elements.
- To extend the life of your chair, maintain the protective coating and put it under a roof in the rainy season.
- Make sure the base of the chair is kept dry by using rubber strips/ stoppers/feet.
- Upcycling takes more time because you may need to remove nails, do additional sanding and cut planks to size. In our case, we had to glue planks together. The benefit is that you've made good use of wood lying in the garage.



## Project guide



Difficulty: Beginner/Intermediate



Estimated cost: Didn't need to buy wood so cost was minimal



Estimated time: 3-4 days







**2** Create a template using hardboard or cardboard for the unusual shapes such as armrests and the seat frame

- As a general rule, practise your DIY like a good chef – clean as you go. This project can generate a lot of sawdust. When you take a break, sweep the floor and dust off your machinery. It'll ensure safety, longevity of your equipment and save you time when you pack up.

## Step-by-step guide

**Step 1:** This chair has a very particular shape. It helps if you find one at a store or friend's house to take measurements. Importantly, measure the angle where the seat meets the backrest and trace a template of the armrests and the two struts that make up the frame for the seat.

**Step 2:** Draw a rough plan with the various lengths and sizes to establish your cutting list.

**Step 3:** Mark out the shapes onto your wood and apply the templates. Be mindful of waste; where you have offcuts, keep them for the small armrest support blocks. By tracing the backrest planks head to toe we were able to save some wood.

**Step 4:** To get the curves for the backrest support planks, we used a thin piece of hardboard and bent it to create the line. Remember that you want to create the impression of a fan, so the curve on the

bottom plank is smaller than the top. Our bottom plank curve length was 305mm and the top one was end-to-end. The backrest planks are also narrower at the bottom than the top; ours measured 35mm and 60mm. Their lengths differ too, and you'll have to determine these as you assemble, cutting them to the length you require. The longest strut in our assembly measured 820mm.



**3** Use your jigsaw to cut out the intricate shapes

**Step 5:** Once we'd made our cuts, we did a pre-assembly of the basic frame and clamped everything in place. We do this to make sure our construction is on track and it allows us to make small adjustments if necessary. It's not essential, but saves you having to make big corrections down the line. It's especially helpful when you need to get an accurate line between the top and bottom backrest support, as well as the angle at which each backrest plank meets the curve of the support, and pre-assembly will help you to determine spacing between the backrest and seat planks, too.

**Step 6:** Note that the back legs intersect on the inside of the seat frame, whereas the front legs are on the outside of the frame. In addition, the armrest sits atop the front leg, but is connected to the back leg by cutting a rebate into the horizontal surface the thickness of the upright, and supporting it with a small block on the underside.

**Step 7:** Use the router and sandpaper to round off all the sharp edges and remove splinters.

**Step 8:** When fixing the seat planks in place, mark the location of each plank and then slightly plane the curved surface of the side



**4** A drill-mounted sanding bobbin isn't essential, but comes in handy to smooth the round edges





The lowermost strut for the backrest is fixed on an angled rebate to the seat frame struts



Create a flat surface for each seat plank



Pre-assemble your construction with g-clamps to keep track of progress and make small adjustments



A router quickly removes the sharp edges of seat planks

struts to allow the plank to sit squarely and securely. Use one screw on either side to fix them in place. From your box of screws, use the longer ones for the frame and the shorter for the backrest and seat planks. When it comes to assembling the backrest planks, start with the centre plank followed by the two outer planks and then space the remainders accordingly.

**Step 9:** Once we'd assembled the chair, we added three layers of sealer, allowing each to dry before sanding gently and applying the next one. ✂



The rear assembly can be tricky. Note how the armrest connects to the strut, as well as the additional support plank between the legs and seat frame



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# Pool covers save money and electricity

By Claire Adlam

Plastic pool covers save water and offer you the opportunity to recycle water from your pool

South Africa is experiencing one of its driest periods in history and with many provinces now under tough water restrictions, pool owners are being called on to change behaviours and critically examine their pool's water footprint and water-saving practices. While tanks and boreholes enable a self-sufficient alternative when it comes to water for the home, many homeowners overlook their existing water storage solution – the swimming pool.



During a drought hibernate your pool with a pool cover



A pool cover allows for reduced chlorine input while maintaining water hygiene

The water and power crises have seen many homeowners emptying their pool entirely. This is never ideal as an empty pool quickly deteriorates and is one of the leading causes of depreciation in property value. An empty pool will crack and the shell can rise from the ground without the weight of the water to keep it in place. The cost of restoring a pool after it has been empty for a while is significant and a new pool pump is often required too.

Homeowners don't always turn to pool water for domestic use as the chlorine content can make it unsuitable for the home.



The one alternative is to stop chemical treatments, but the pool quickly turns green and unsightly, and becomes a breeding ground for mosquitoes. The better solution is a pool cover that allows for reduced chlorine input while maintaining water hygiene at a level that makes the water suitable for use in the kitchen and bathroom.

“It sounds too good to be true – a pool receiving minimal filtration and chemicals yet still yielding water clean enough for use in the house, but it can be done!” says Carolyn Idas of PowerPlastics Pool Covers. “The principle is quite simple. Algae thrives on light. If you block out the light with a dark-coloured pool cover, the algae dies off. Without the algae, chemical input can then be scaled back considerably. This effectively creates a water supply to fall back on when you have reached your allowance from municipal sources and are facing heavy fines. Our tests show that with a dark-coloured thermal pool cover, filtration can be reduced by 50% without the water hygiene being compromised – an added bonus when one considers South Africa’s need to save power as well as water,” says Carolyn.

The other factor to consider is actually keeping the water in the pool. In typical conditions, for every square metre of water surface, the average pool will lose a metre of water to evaporation over a year. Pool covers instantly reduce evaporation by over 98%. “Our climate is becoming drier and we need to become more practical and innovative in the long term. Pools aren’t just a source of fun and exercise any more. Think of a covered pool as your own mini reservoir and emergency water supply,” says Carolyn.

If child safety is of concern, one can still scale back chemicals, filtration and prevent water evaporation by using a solid safety cover that forms a complete barrier over

### Tips for maintaining pools during a drought

- Close or hibernate your pool with a cover to reduce evaporation by over 98%.
- Choose a dark-coloured pool cover to reduce algae growth and scale back chemical levels. This will yield water that can be used in the home when you have surpassed your water allowance.
- If you have features such as fountains or jets in your pool, turn them off. Not only do they increase power consumption, the aeration will increase water evaporation.
- If you have an older pool pump, look into the newer more eco-friendly and water-efficient pool pumps now available locally.
- Don’t be tempted to abandon your pool and empty it or let the water lie stagnant. It can become a health risk and also a drowning risk. An empty pool will also rise from the ground without the weight of the water to keep the structure in place.
- Don’t use recycled kitchen or bath water in your pool – the ammonia found in cleaning agents and detergents can wreak havoc on a pool’s pH and quickly weather any PVC covers or accessories. Instead, collect rainwater and use it to top up your pool, if needed.
- Keep the water in the pool! Avoid diving and boisterous swimming to reduce splashing.
- For those who let their dogs swim, this is equivalent to 30 people swimming at once. It requires the filtration system to work even harder to oxidise any pet residue like fur, as well as increases evaporation and water loss from splashing.



The dirt and fur from a dog requires the pool filtration system to work much harder



Don't let the water lie stagnant as it can become a health risk

the water and prevents all access by children. A thermal pool cover/pool blanket that lies directly on the water should not be considered a cover for child drowning prevention.

“Water scarcity has a devastating effect on the area’s economic and social infrastructure, and ultimately affects the whole country. Better water resource

management in the domestic environment is needed, and heavy water users such as pool owners have an integral part to play in times of drought. Be responsible, cover up and you can still enjoy your pool all summer without guilt or waste!” concludes Carolyn. ✕

Source: PowerPlastics Pool Covers  
[www.powerplastics.co.za](http://www.powerplastics.co.za)

## Bathrooms

Latest trends and products.....	July 2015 .....	Pg 12
Extractor fans.....	July 2015 .....	Pg 26

## Bicycles

Maintenance.....	December 2015.....	Pg 40
------------------	--------------------	-------

## Damp & waterproofing

Identifying and preventing.....	July 2015 .....	Pg 22
Waterproof your roof.....	August 2015.....	Pg 12

## Decking

Restoration project.....	December 2015.....	Pg 12
--------------------------	--------------------	-------

## Energy

LP gas appliances.....	November 2015 .....	Pg 34
Generators .....	June 2015 .....	Pg 34

## Fireplaces

Choose a fireplace.....	June 2015 .....	Pg 46
-------------------------	-----------------	-------

## Flooring

Concrete floors.....	October 2015.....	Pg 12
How to lay tiles.....	Jan/Feb 2015.....	Pg 17
Fresh look for old tiles.....	June 2015 .....	Pg 18

## Furniture repairs

Furniture restoration.....	April 2015.....	Pg 12
----------------------------	-----------------	-------

## Gardens

Create a greenhouse.....	March 2015.....	Pg 18
Lawnmower maintenance.....	September 2015.....	Pg 24
Micro mist irrigation system.....	September 2015.....	Pg 12
Garden hardware .....	September 2015.....	Pg 18
Green lawns .....	October 2015.....	Pg 20

## How to

Remove oil stains from concrete.....	April 2015.....	Pg 45
Solder copper pipe.....	May 2015.....	Pg 47
Give your appliances a makeover.....	June 2015 .....	Pg 32

## Interiors

Choose the right air conditioner.....	Jan/Feb 2015.....	Pg 12
Ceiling fans.....	Jan/Feb 2015.....	Pg 18
Types of glass in the home .....	December 2015.....	Pg 32
Ceiling options.....	May 2015.....	Pg 12
Feature walls .....	March 2015.....	Pg 12

## Kitchens

Kitchen sink step-by-step.....	Jan/Feb 2015 .....	Pg 47
Kitchen makeover.....	June 2015 .....	Pg 12

## Lighting

Light bulb comparisons.....	April 2015.....	Pg 28
LED lights.....	December 2015.....	Pg 20

## Home maintenance

Nail in the wall guide.....	June 2015 .....	Pg 22
Cracks on walls.....	July 2015 .....	Pg 30
Gutters, protect and install.....	August 2015.....	Pg 18
Remove rust.....	August 2015.....	Pg 32
Drains.....	October 2015.....	Pg 38

## Metalworking

Welding for beginners.....	March 2015.....	Pg 34
Welding for beginners (part 2).....	April 2015.....	Pg 36
MIG welding basics.....	May 2015.....	Pg 36
Working with copper.....	June 2015 .....	Pg 44
Brazing basics.....	July 2015 .....	Pg 42
Knife-making.....	August 2015.....	Pg 44
Knife-sharpening by hand.....	September 2015.....	Pg 42

## Outdoors

All about bees.....	June 2015 .....	Pg 38
Tree house, build a.....	September 2015.....	Pg 32
Braais, types.....	October 2015.....	Pg 26
Patio protection .....	November 2015.....	Pg 12
Thatched roofs .....	November 2015.....	Pg 18

## Outdoor projects

Sandpit, build a.....	March 2015.....	Pg 32
Clay brick bird bath .....	April 2015.....	Pg 46
Yard storage space.....	May 2015.....	Pg 24
Vertical garden .....	May 2015.....	Pg 40
Bird house.....	May 2015.....	Pg 44
Compost bin.....	June 2015 .....	Pg 30
PVC poolside towel rack.....	October 2015.....	Pg 34
Bats and owls in the city.....	September 2015.....	Pg 36

## Painting

Surface preparation .....	September 2015.....	Pg 44
---------------------------	---------------------	-------

## Paving

Driveway paving, installing.....	August 2015.....	Pg 22
Replace paving.....	August 2015.....	Pg 24
Concrete paving.....	October 2015.....	Pg 17

## Perspex

Working with Perspex.....	August 2015.....	Pg 34
---------------------------	------------------	-------

## Preserving wood

Wood boring organisms.....	June 2015 .....	Pg 41
Outdoor wood, treating and maintaining.....	December 2015.....	Pg 16



## Readers' projects

Make a coffee table.....	July 2015.....	Pg 44
Simple nail removal.....	September 2015.....	Pg 47
Vegetable patch net covering.....	December 2015.....	Pg 54

## Renovations

Labour laws.....	Jan/Feb 2015.....	Pg 3
Home office.....	Jan/Feb 2015.....	Pg 42
Windows and doors, materials.....	April 2015.....	Pg 18
Hiring contractors.....	July 2015.....	Pg 34
Building procedures.....	July 2015.....	Pg 38
Install a new tap.....	July 2015.....	Pg 18
Skylight installation.....	November 2015.....	Pg 22

## Rodents

House rats.....	November 2015.....	Pg 42
-----------------	--------------------	-------

## Security

Top security tips.....	March 2015.....	Pg 36
A-Z security options.....	May 2015.....	Pg 18

## Soundproofing

Soundproofing options.....	March 2015.....	Pg 26
----------------------------	-----------------	-------

## Swimming pools

Solar pools.....	Jan/Feb 2015.....	Pg 26
Filter sand.....	October 2015.....	Pg 30

## Tools

Air compressors.....	April 2015.....	Pg 26
Brushless motors for power tools.....	November 2015.....	Pg 26

## Top tips

Toothpaste uses.....	Jan/Feb 2015.....	Pg 35
Cutting plywood.....	May 2015.....	Pg 43
Cable clutter.....	June 2015.....	Pg 26
Upcycling spare tiles.....	June 2015.....	Pg 29
Tabletop stain removal.....	July 2015.....	Pg 29
Battery care.....	September 2015.....	Pg 22
Surge protectors.....	October 2015.....	Pg 46

## Vehicle maintenance

Car tyres, maintenance.....	June 2015.....	Pg 37
Topping up motor oil.....	August 2015.....	Pg 49
Service your motor oil.....	November 2015.....	Pg 38

## Water

Water filtration system.....	Jan/Feb 2015.....	Pg 22
Fix a leaky roof.....	March 2015.....	Pg 30
Harvest rainwater.....	May 2015.....	Pg 28

DIY aquaponics system.....	September 2015.....	Pg 28
Water filters.....	December 2015.....	Pg 44

## Woodworker's profile

John Young.....	November 2015.....	Pg 46
Buster Tinsley.....	December 2015.....	Pg 48

## Woodworking projects

Wooden carport.....	Jan/Feb 2015.....	Pg 38
Dog kennel.....	Jan/Feb 2015.....	Pg 48
Jungle gym.....	March 2015.....	Pg 22
Patio set.....	March 2015.....	Pg 40
Country-style kitchen cabinet.....	March 2015.....	Pg 44
Wine rack.....	March 2015.....	Pg 49
Garden shed.....	April 2015.....	Pg 22
Storage drawer.....	April 2015.....	Pg 32
Mother's Day tray.....	April 2015.....	Pg 38
Refurbish a chest of drawers.....	April 2015.....	Pg 42
Outdoor bar.....	May 2015.....	Pg 32
Dog treat toy.....	May 2015.....	Pg 48
Father's Day toolbox.....	June 2015.....	Pg 48
Pallet wood study desk.....	July 2015.....	Pg 48
Floating shelf.....	August 2015.....	Pg 28
Towel rail.....	August 2015.....	Pg 46
Coffee table.....	August 2015.....	Pg 52
Owl box.....	September 2015.....	Pg 38
Floor lamp.....	September 2015.....	Pg 48
Headboard.....	October 2015.....	Pg 42
TV cabinet.....	November 2015.....	Pg 28
Cat scratching post.....	November 2015.....	Pg 48
Tool rack.....	December 2015.....	Pg 26
Herb planter box.....	December 2015.....	Pg 36

## Woodworking advice

Bits, looking after.....	Jan/Feb 2015.....	Pg 52
JAGS, adjustability.....	March 2015.....	Pg 52
Finishing touches to projects.....	April 2015.....	Pg 40
Built-in dressing table.....	April 2015.....	Pg 52
Mock up, prototype & final product.....	May 2015.....	Pg 52
Fitting out a bathroom.....	June 2015.....	Pg 52
Hiding plumbing pipe.....	July 2015.....	Pg 52
Floating shelves.....	August 2015.....	Pg 26
Modern woodworking adhesives.....	August 2015.....	Pg 36
Sharpen router bits.....	August 2015.....	Pg 40
Replicating cuts.....	September 2015.....	Pg 52
Workbench.....	October 2015.....	Pg 52
Joints.....	October 2015.....	Pg 48
Double ball door catch, fitting a.....	November 2015.....	Pg 52
Safety is no accident.....	December 2015.....	Pg 50
Basic woodworking tools.....	December 2015.....	Pg 24

Some of the power you receive at home may have been generated using photovoltaic (PV) solar energy. How does the development of this technology affect you?

By Gareth Greathead

**P**hotovoltaic (PV) solar systems collect energy from the sun using solar panels and store the power in batteries ready for use later on. Due to the energy crisis, sustainable energy has been prioritised by government, with contracts being awarded to private sustainable energy companies (Independent Power Producers) by the Department of Energy. The majority of these use the sun or wind to produce energy, and are known as PV solar or wind 'farms'.

Over and above mitigating environmental impact, sustainable energy farms can be brought online faster than traditional coal-fired power stations. Several companies have already commissioned their farms and reports from these companies suggest that the set-up costs are cheaper than coal-fired power stations of equivalent output.

This means that some of the energy you get at home may have been generated through sustainable means. PV solar systems come in a variety of scales and enable homeowners to supplement their electricity bill. At the same time, domestic set-ups, large enough to take you off the grid, remain out of reach of the average homeowner.

### Introducing PV solar energy

Paul Lombard, account manager at Sungrid, says, "For many, the concept of PV solar brings to mind large, expensive, complicated installations, which require professional installation." Understanding energy related terms like watts, amps, megawatts and many other scientific measurements and variables is difficult.

Paul says that people will benefit from practical experimentation with portable, plug-n-play PV solar systems more than anything else. Homeowners are able to alter the positioning of the collector in relation to the sun, seasonal changes and weather patterns. "It takes practice to become efficient at collecting (as much energy per day as possible)," says Paul.

# Powered by the sun



Large solar set-ups, large enough to take you off the grid, remain out of reach of the average homeowner



▼ Small portable systems like the Ecoboxx 120 are affordable and supplement energy requirements



It is hoped that this will make people more receptive to larger installations and less dependent on fossil fuels. Paul says, "Simple-to-use portable systems are cost-effective and people become familiar with the working of the system, types of batteries and the potential of solar panels in an easy, fun and independent way. Our goal is to provide cost-effective solutions, allowing everyone the opportunity to access sustainable power generating technology."

### Improving living standards

"Portable PV solar systems provide a sense of independence and allow you to explore the world we live in. If you are planning a trip into the Namib Desert, for example, you can generate your own power for charging or powering laptops, radios, camping fridges, search lights at night or fans."

Sustainable energy makes universal access to electricity achievable. Over the past 10 years or so, houses in townships have been fitted with solar hot water systems that provide them with hot water. PV solar farms offer similar benefits and are more

cost-effective on a smaller scale than coal-fired plants. They can also be constructed anywhere.

### A meaningful saving for all

With continuous electricity tariff increases, the declining cost of sustainable energy technology will one day make larger PV solar systems a viable and cost-effective energy solution. At the moment only small, portable systems are affordable to the average homeowner but these have the capacity to supplement your energy requirements.

Paul says that PV technology has already reached a stage where it can deliver a meaningful saving for all, "If the average person in a township spends R6 to R10 per week on candles and lighting substitutes such as kerosene, they will be spending R312-R520 per year on lighting alone. Then add what they spend to charge their cell phones, usually R5 for an hour every day, they can easily spend a further R35 per week. This equates to as much as R1 820 per year for charging their phones alone. Within this scenario, using our Ecoboxx

160DC+ it would take less than 2.6 years for the system to pay for itself with savings made on electricity. From then onwards it will provide 7.5 years of free energy before the battery has to be replaced. This equates to a saving of over R10 000 over the seven years and the solar panels will last another 20 years with new batteries," says Paul.

He adds that if a higher LSM customer purchased a 1 500 watt unit at a cost of R22 999 to power their entertainment system, television, decoder, surround sound and some lighting every night, they would be saving 1.5 kilowatts of power daily.

### PV solar 20 years from now

Like all new technology, the money spent by companies on research and development has to be recuperated, and the cost is passed onto the consumer. As PV solar technology develops and becomes widely used, the price will come down, making larger domestic systems more affordable for homeowners. Paul says, "Solar technology is continuously improving as the world's focus shifts more towards renewable energy and therefore the payback period is reducing over the long term. For example, the cost of solar panels is coming down while efficiencies are going up." Paul makes special mention of improvements in battery technologies that are allowing these units to be used for longer periods of time before needing replacement, which further reduces the running costs.

"Before 2020, we anticipate that almost 50-60% of households in South Africa will have some sort of solar product. The use of sustainable energy products will grow as the awareness and trust in the advancements of solar technology continues to improve. Solar products are not just a load-shedding solution, but a chance for people to access clean, free power on a daily basis to improve their lives while also reducing living expenses." ✕

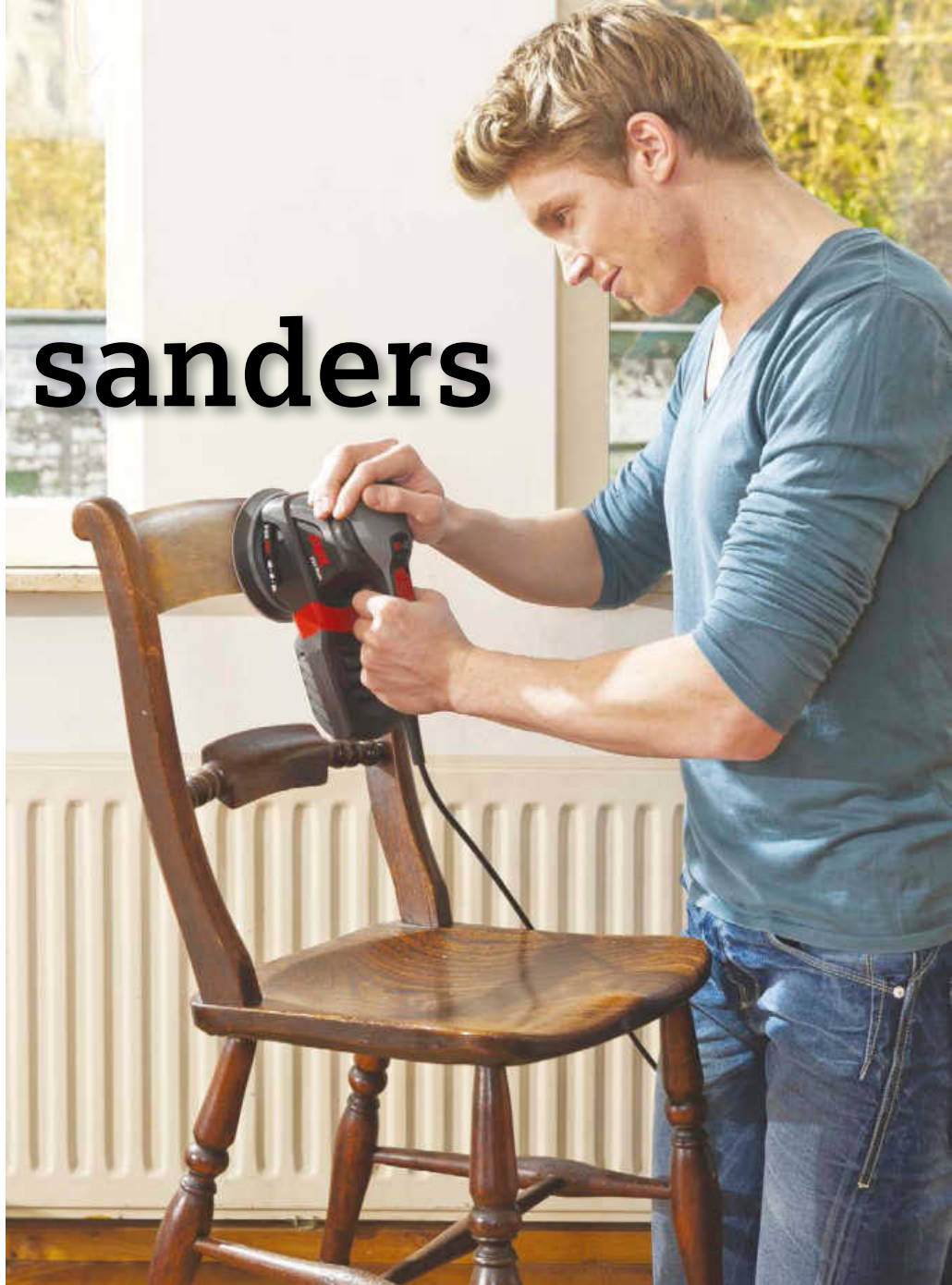
# Electric sanders

Whether sanding by hand or using electronic assistance, use of the correct paper and technique will impact on your end result

By Gareth Greathead

**M**any home DIY chores such as painting gutters, resurfacing a door or maintaining wood require sanding. Electric sanders can save woodworkers hundreds of hours when it comes to the preparation of wood.

Sandpaper has a paper or fibre backing and comes in grits ranging from 40 (course) to 3000 (extra fine) and everything in between. The two most commonly used abrasive materials used to make sandpaper are silicone carbide (general purpose) and aluminium oxide (for wood). The silica used is derived from different sources and some are more appropriate than others for a particular application. Wet and dry paper resists clogging when sanding; the intended application will be marked on the back of the sandpaper and will indicate the applicable materials. The sandpaper used on electronic sanders is not the same as that on ordinary sheets of sandpaper. They normally have an additional coating that makes the disc, sheet or belt last longer.



The lower the number on the sandpaper, the coarser the particles and the deeper the scratches it imparts on the wood. Commonly available grits for electric sanders range from 80-240 grit. Sheets of sandpaper start at 60 grit and are available in grits as high as 3 000, and to obtain a smooth surface on wood, the use of steel wool is recommended.

## Belt sanders

Belt sanders are big, heavy and powerful tools that can remove a large amount of

material quickly. At home a belt sander can be used to flatten a large, flat surface such as a door, deck or even hardwood floors. It is also good for removing paint and varnish. These machines are loud and can be dangerous if you aren't careful.

Belt sanders use reinforced belts that form a continuous loop. Belt sanders come in three different sizes and the belts in a variety of lengths and widths. Larger machines and belts will be more aggressive than smaller sanders.



The general design consists of two cylindrical drums at the front and back of the sander. The one at the rear is powered by the motor and the one in front is free running and has a fine belt adjustment knob to help with belt tracking. There is normally a belt release lever on the open side of the sander for replacement of belts. There is a steel skid placed at the bottom of the sander and this is the area where the sandpaper contacts the surface being sanded. Most sanders also have a dust port that can be connected to a dust extraction system or household vacuum cleaner.



▲ Belt sanders can remove a large amount of material

#### Using a belt sander

Applying too much pressure will create deep impressions in the wood that can be difficult to remove. Sand with the grain and keep the sander moving at all times to avoid sanding depressions in the wood. Move the sander in a circular motion with the grain. Also, hold the sander by the handles and allow the weight of the sander to do most of the work. Adding too much pressure will also cause belts to wear faster and clog with varnish and paint.

Edges of boards can be sanded with a belt sander. It can be difficult to keep the sander flat against a narrow edge, and if you plan to sand more than one edge, it is better to clamp several boards together. This makes it easier to balance the sander and ensures that all the edges receive the same amount of attention.

### Orbital sanders

The orbital sander has a base plate attached to the body of the sander via rubber grommets. The internal drive delivers power through these grommets causing the base to vibrate. This configuration causes the sander to oscillate creating a gyroscopic movement which moves the sandpaper underneath in a random oval pattern. If you hold an orbital sander against a workpiece and sand very lightly, you will feel how it gravitates towards a different direction each time – something like a pool Kreepy.

In operation the oscillating action will be combined with the vertical or horizontal input from you moving it up and down. It is designed to remove only a small amount of material and is used in the final finishing. This makes orbital sanders more forgiving and easier to perfect.

#### Using an orbital sander

Applying too much pressure will strain the sander, causing it to bog down. At the same time, the pressure will cause the sander to create shallow swirls on your work surface that undo any progress you may have made. The handles on an orbital sander are mainly for guidance and keeping the sander flat against the work surface. Holding the sander by the handles will allow you to apply even, gentle pressure, maximising the contact area of the abrasive.



▲ Orbital sanders remove a limited amount of material



When sanding the edges of boards, allow only half of the sanding pad to extend over the edge of the piece being sanded. This will prevent rounding of the edges.

### Orbital finishing sanders

#### Quarter sheet square finishing sanders

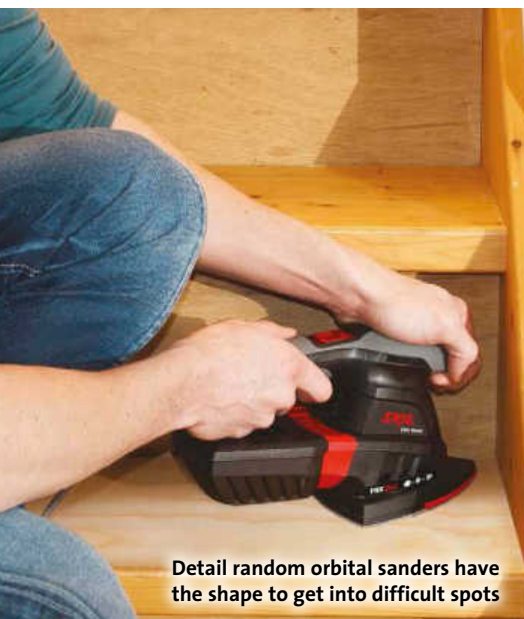
are relatively quiet, have low vibration and can reach places the larger orbital sander cannot reach. For example, it will be possible to get right into the corner of the surface on the inside of a framed object. It is called a quarter sheet because it uses a quarter of a conventional sheet of sandpaper.



◀ Quarter sheet square finishing sanders have low vibration

### What to look for in an electric sander

- Sanders with a lower wattage are less aggressive and easier to use.
- Sanders with higher wattages are designed to remove more material.
- Sanders should come with a dust port and dust collector bag or collector and filter bag.
- Check that the dust port can be connected to a household vacuum cleaner or extraction unit.



**Detail random orbital sanders have the shape to get into difficult spots**

**Detail/finishing random orbital sanders** are smaller and normally have a shape that allows you to get into difficult spots. They are good for picking out high spots and reaching into crevices. Some of these sanders come with interchangeable accessories in shapes that are designed to help you get into the tightest spots.

### Random orbital sanders

Random orbital sanders oscillate, but also rotate the sanding disc at high speed. They have a round sanding pad and will remove more material than an orbital sander, but less than a belt sander, making it the perfect all rounder. The spinning motion added with the random orbital sander means that the path of the paper moving around changes. When trying to flatten an indentation or imperfection, it can be tempting to tilt the sander in an effort to apply concentrated pressure in a particular area. This will certainly damage the surface and take you back a few steps. These sanders normally have one handle and are operated with one hand, allowing greater manoeuvrability. ✖

▲ Random orbital sanders oscillate and spin at the same time

## How to use an electric sander

- Start with a coarse grit sandpaper and move your way up.
- Allow your strokes to overlap slightly.
- Avoid applying too much pressure – allow the sander to do the work.
- Move the sander parallel to the grain of the wood where possible.
- Always keep the sander flush against the surface.
- You can run a pencil over the surface being sanded. This will allow you to see where the sander is making contact and where more work must be done.
- As with most power tools, it is important to have the orbital sander running before it makes contact with the work surface and only switched off when it has left the piece.
- It's easy to become obsessed with the sanding job; giving the tool some rest time every half an hour or so may help to prolong the life of the sander.



## Safety

Sanding produces tiny microscopic particles of dust that may not be visible to the eye. This dust can permanently scar your lungs and reduce lung capacity. Many sanders are loud and because they are often used for a long period of time, the possibility of hearing damage is increased. At the same time, it is impossible to know if there are nails or other objects in the wood you are sanding. A sander has the ability to launch an object at speed. Because of these dangers, a dust mask, hearing protection and safety goggles are required.



# MARTLET

Light Industrial Machinery

## A Passion For Woodworking



**1500W**  
Single phase

### Table Saw - SB250C with Sliding Table and Open Stand

Saw blade/bore size (mm)	30/254mm
Blade speed (r/min)	4750
Max. depth of cut at 90°	82mm
at 45°	60mm
Max cutting width	750mm
Coupling joint for vacuum exhaust	65/25mm
Table size (mm)	635 x 430
With table extension (mm)	635 x 1030
Gross weight	58kg



**370W**  
Single phase

### Bench Morticer HM16D-800 (MS3816)

Spindle speed (r/min)	1400
Chisel capacity (mm)	6 - 16
Max. mortising depth	76mm
Drill chuck capacity (mm)	1 - 13
Max. clamping width	125mm
Vertical stroke	60mm
Lateral stroke	160mm
Spindle to fence	70mm
Chisel to fence	130mm
Overall height	800mm
Gross weight	46kg



**1500W**  
Single phase



### Planer and Thicknesser ML392

Planing table size (mm)	1050 x 250
Thicknessing table size (mm)	600 x 250
Cutter block diameter	75mm
Feeding block diameter	32mm
Cutting knives (pcs)	3
Fence tilt	0° - 45°
Dust chute diameter	100mm
Max. planing width	250mm
Max. thicknessing width	250mm
Rabbeting (mm)	13 x 152
Max. cutting depth	2.5mm
Max thicknessing height	180mm
Cutting block speed (r/min)	4000
Feed speed	4.8m/min



**440W**  
Single phase

### Belt and Disc Sander BDS46

Speed (r/min)	2850
Disc size	150mm
Belt size (mm)	100 x 915
Table size (mm)	158 x 225
Disc table tilt	0° - 45°
Belt table tilt	0° - 45°
Gross weight	18kg

For further info. on the Martlet range contact Rutherford:  
• JHB: 011 878-2600 • CT: 021 932-0568 • DBN: 031 717-6400

**Rutherford**

A MEMBER OF THE **Hudaco** GROUP



# Make a portable flower box

By Aarifah Nosarka

## Project guide



Difficulty: Beginner



Estimated cost: ±R100



Estimated time: Two hours



Start off the new year on a cheerful note by constructing a transportable flower box from pallet wood to brighten up the interior or exterior of your home



This project is specifically targeted at beginner handyman and handywomen who enjoy working with wood. Gareth and I built this simple flower planter box on a day where the maximum temperature reached 30°C. Photo credits go to Rosemary (our designer) – she is also the person responsible for the weathered appearance of the box. She got the effect using grey chalk paint and the dry brush technique. This was certainly a fun filled, teamwork-inspired project.



## Tools

- Drill driver
- Jigsaw
- G-clamp
- Pencil for measurements
- Safety glasses and hearing protection
- Framing square



## Materials

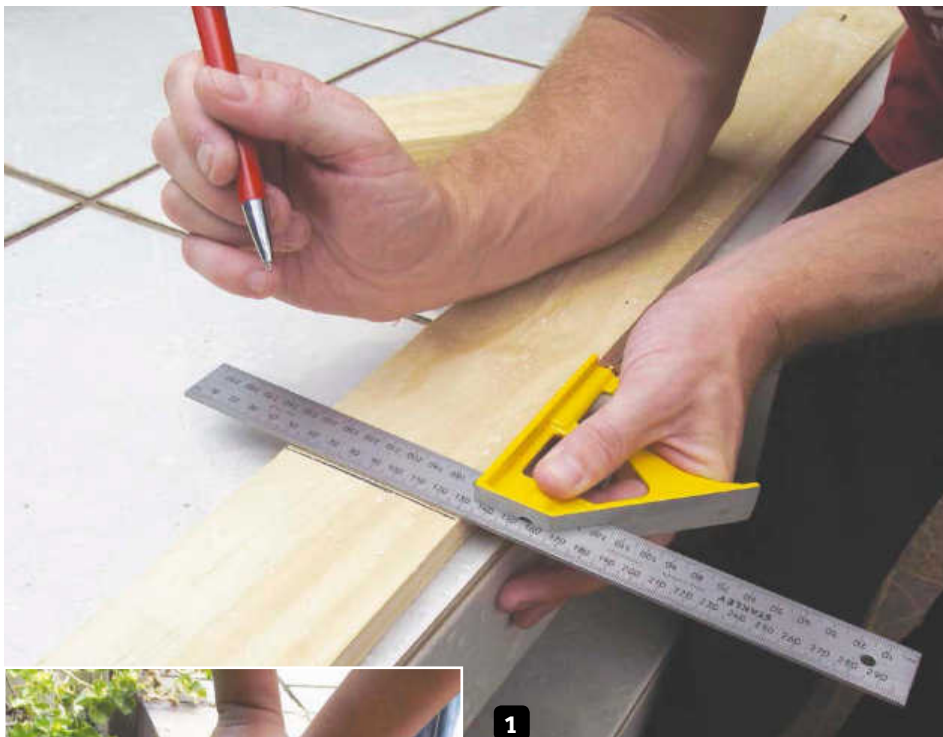
- 3mm drill bit
- Approximately 20 screws
- Two 2.4m lengths of crate wood
- Chalk paint



## Cutting list

From the two 2.4m x 80mm x 16mm crate wood planks, cut the following:

- Six 400mm lengths (A-parts)
- Four 155mm lengths (B-parts)
- One 432mm x 40mm length (C-part)
- Two 200mm x 40mm lengths (D-parts)



1

We marked our lines using a framing square



2

A jigsaw was used to cut along the lines

giving us two 40mm wide strips, these were trimmed to one 435mm (C-part) and two 200mm (D-parts) for the handle.

The dimensions are not important, but help with the planning, design and assembly of the box.

**Step 2:** Cut along the marked lines using a jigsaw, hand saw or circular saw. Remember to wear safety goggles and hearing protection when using power tools.

**Step 3:** Clamp two of the longer pieces (A-parts) together at a 90° angle and use screws to butt the pieces together. We used three pilot holes and screws, one near each end and one in the centre. Do the same with the other two pieces.

**Step 4:** Place the two L-shaped pieces next to each other and insert two of the shorter lengths between the inside edges at the ends. This will give you a rectangular shape and you will notice that the newly added pieces stick out higher than the others.

## Step-by-step guide

**Step 1:** Start by marking out the lengths for the longer sides of the planter using the framing square and a pencil. We marked out six 400mm (A-parts) for the longer sides and four 155mm (B-parts) for the width. When assembled, there will be a small gap in the base of the box to allow for drainage should the collector dish of the flower pot overflow. We then took a 500mm long section and split it in half,

**Step 5:** When adding the second layer of the box, you can leave a small gap between the A-parts before screwing the last two A-parts to the pieces that stick out using four screws. The B-parts are now attached to the A-parts with only two screws on each side. To complete the box, place the last two 155mm (B-parts) in the open spaces and drill another four screws into each side of the box.



**3** Our G-clamp came in handy when butt jointing the base to the sides



### Tip!

Even when using cut screws, pilot holes make it easier to drive screws without splitting the wood.



**4** The shorter lengths are inserted in-between the sides creating the bottom of the box



**5** Aarifah screwing the uppermost slat in place

**Step 6:** Once all the sides are assembled, the handle can be fitted. Screw the two 200mm x 40mm pieces in the centre of the shorter sides.

**Step 7:** With these in place, mount the 432mm handle in-between the 200mm pieces on each side. Two screws are needed on each side to make the handle sturdy.

**Step 8:** You can paint the box the colour you want – you can even match the colour to the surrounds of where you plan to place your flower planter box. ✂



**6** The supports for the handle are screwed to the side of the box



### Tip!

Sections cut from crate wood may need some manipulation when being screwed together.



**7** Rosemary chose to dry brush the box with light grey chalk paint



# Early starter



The 2015 chairman of the Woodworking Association of Pretoria, Hennie Ackermann, proves that you don't need a workshop filled with tools to enjoy woodworking

By Gareth Greathead

**H**ennie is yet another woodworker who had to put his love for woodworking on hold to make a reasonable living in a capitalist society. He started work as a radio mechanic apprentice in the South African Defence Force in 1964. After that he worked as an electronics technician at Standard Telephones and Cables before moving to the drawing office, where he did mechanical and electrical design drafting. Before retiring in 2012, he worked for various Armscor divisions and several private companies.

## An early introduction to woodworking

Hennie's father was a cabinet-maker by trade and is the man responsible for Hennie's love of woodworking. "I lived in his home workshop while he was doing repairs, restoration and making new furniture pieces for people, and needless to say the love for woodwork was inevitable.

"I grew up in the mining town of Orkney, near Klerksdorp, and it took only half an hour of thunderstorms and the dirt roads became rivers. My first woodworking projects were little wooden boats, which I

tested out in the road river, to my father's discontent using his pieces of wood that might have been cut for his projects!"

## Getting serious about woodworking

Hennie only had the time and resources to start woodworking as a hobby again in 1985. He started up with only hand tools apart from a Black & Decker hand drill. "I collected power tools slowly due to the cost and my first router was a small Toshiba, which I took over from my father, along with a Makita belt sander – both still work after 35 years with only some bearing and brush replacements."

In 1997, Hennie was able to buy a second-hand Dewalt radial arm saw and an Elektra Beckum 260mm joiner thicknesser from a retired school teacher. A few years later he bought a table saw and a big belt/disk sander from a colleague who was a tool-maker by trade and who built them himself. "I also picked up a second-hand Eurasia band saw. These machines have brought me only joy and helped me with all my projects since. Despite this, I love to use my hand tools even if my right upper arm does not want to play with sometimes."



A half round table Hennie made for his wife out of kiaat



Seringa box with rosewood inlays



A 3/4 bed with pull-out extra bed made from cypress wood

## Sharing information

Hennie has been a member of the Woodworking Association of Pretoria (WAP) since 1998. "I served the last three years on its committee and was elected chairman in January 2015. Although my father was a good teacher and gave me a great foundation in woodworking, I must say that I have learned a great deal at WAP, where turners and cabinet-makers share invaluable information at meetings.

"I enjoy making new furniture pieces but love to do restoration and repairs, especially on antique furniture. My favourite wood is, of course, white oak, but I will work with almost any type of wood. I dislike siligna because it warps and splits." ✂



# Car care tips

By washing your car regularly and using the right chemicals you can extend the life of its paintwork

Vehicles should be washed weekly or at least fortnightly to remove grime and protect the finish. Improper care can cause paint to dry out and expose it to contaminants. Maintaining your car's paintwork correctly will also help to retain the overall value of your car.

However, there are things to look out for so you don't accidentally cause damage to your vehicle. Some contaminants can cause serious long-term damage to

paint if they are allowed to remain, for example bird droppings, which can be acidic and eat away at the paint, so it is best to remove them as soon as possible. Washing your vehicle weekly will remove other contaminants such as brake dust and roadway chemicals before they have the opportunity to do permanent damage.

## Washing materials

Use vehicle shampoo that is tough enough to dissolve dirt and grime and at the same time not so aggressive that it strips existing layers of sealant. Avoid using household cleaning agents such as hand soap, dishwashing detergent or glass cleaner on the paint. These are not formulated for use on car paint and may strip off the protective wax and even the paint.

Plush sponges and mitts are better to use than flat weave towels or dense sponges. Another recommendation is to use a high quality lamb's wool or sheepskin wash mitt in place of a traditional sponge. A chamois will not leave scratches on the vehicle and is perfect for drying. Another option is a plush microfibre cloth, which collects dust – this must be washed with Sunlight soap regularly.

## The washing process

When washing your car:

- Pre-rinse the surface using a hosepipe to remove as much of the dirt and debris as possible.
- Avoid washing your car in direct sunlight – choose a shady spot for both you and your car.
- Start by washing the wheels with a designated cloth first. By doing this, if you happen to splash dirt from the wheels onto the vehicle, it can be rinsed from the body of the vehicle when you clean it afterwards. There are many specialist degreasers and cleaners that are safe for use on wheels.





Use a high quality lamb's wool or sheepskin wash mitt



## Note!

- Dishwashing liquid will clean the car, but strip the vehicle's protective coating.
- Don't use a circular motion when washing or drying. This will leave small scratches known as swirl marks.
- A high pressure cleaner removes dirt better and saves water at the same time. Remember to adjust the pressure on the nozzle to prevent damage to the paintwork.

- It's important to use products rich in lubricants that are designed for use on automotive paint. The purpose of the product is to remove contaminants and lubricate the surface to prevent scratches during washing.
- When washing the vehicle, start at the top and work your way down. Wash horizontal surfaces using a sideways motion and vertical surfaces using an up and down motion.
- Use a chamois or microfibre cloth to dry the vehicle and follow the same method explained above.
- Wax wears off after a while and should be reapplied every three months. Wax helps protect the paintwork on your vehicle by absorbing stains and small scratches. ✖



A high pressure cleaner removes dirt better and saves water at the same time

# Screwdrivers, screws and bits

Selecting the right screw and pairing it with the correct screwdriver or driver bit will ensure your pieces come together perfectly, and save you the aggravation of stripped screws and drivers

Screws and bits come in a variety of shapes and sizes. Screwdrivers are handheld tools, while driver bits are designed to fit into electric drills. Screws come with different threads, shanks and heads to suit different applications.

## Types of screws and their application

### Cut screws

These are perfect for general carpentry jobs and the cutting point cuts its own path into the wood. "These are excellent when fixing wood to wood or metal to wood." The great thing about these screws, depending on the type of wood you use, is that they don't require pilot holes when using the 3-4mm screws.



### Wood screws

The need for steel wood screws has largely been replaced by the advent of modern screws but they still appeal to antique furniture makers and restorers who wish to stay true to the design and build style of said furniture. "On the plus side, these screws are extremely strong, thanks to the smooth shank being the same outside diameter as the first few threads. This is most likely the reason why they are a popular choice for hanging heavy doors," says DIY expert Roelof Strydom. Wood screws require pilot holes 2mm smaller than the size of the screw itself.



### Chipboard screws

As the name suggests, these screws can be used when doing general DIY work with chipboard and other softer woods. According to Roelof, unlike cut screws, they do not have a cutting point and also require pilot holes to be drilled 2mm smaller than the size of screw used. Chipboard screws are also available as smooth shank and full thread variants.



### Self-tappers

These have special threads designed to cut threads as they are driven into untapped pilot holes. These screws are mostly used in the automotive and aircraft industries as well as to build metal shelving and furniture.



### Drywall screws

These have extremely sharp points and threads, and are specifically designed to secure drywall or ceilings to a substrate such as wood or metal. The sharp points and threads enable lightning fast insertion of the screws into drywall and its support structure. The screw head design, known as bugle heads, enable drywall screws to be embedded in the drywall, resulting in a flush or recessed finish that can later be filled and painted over to give a smooth finish. They can also be used for woodworking projects as their coarse thread is perfect when working with soft wood or man-made boards such as chipboard, MDF or plywood.







## Tip!

It is easy to identify which screwdriver bit should be used with a particular screw head. The type and size of the screwdriver bit are displayed on the screw packaging. "For example, Eureka cut screws come in three square bit sizes: S1, S2 and S3 square bit. The same goes for Pozzi, Phillips and Torx screwdriver bits. You will notice the same designations marked on the screwdriver bits themselves. For example, PZ2 tells you that a number 2 Pozidriv screwdriver bit must be used," says Roelof.

## Types of threads and shanks

### Smooth shank screws

These are used when fixing wood to wood. Roelof says the smooth shank of the screw allows it to spin freely in the top piece of wood and pulls the bottom piece tightly against the top piece, leaving no gap between the two. "The smooth shank also prevents the screw head from pulling into the top piece reducing the potential damage to the wood."



### Full thread screws

These are used when fixing metal to wood. "Unlike smooth shank screws, when driving in full thread screws, the top material cannot move along the shank. Instead, it is held in place by the threads."



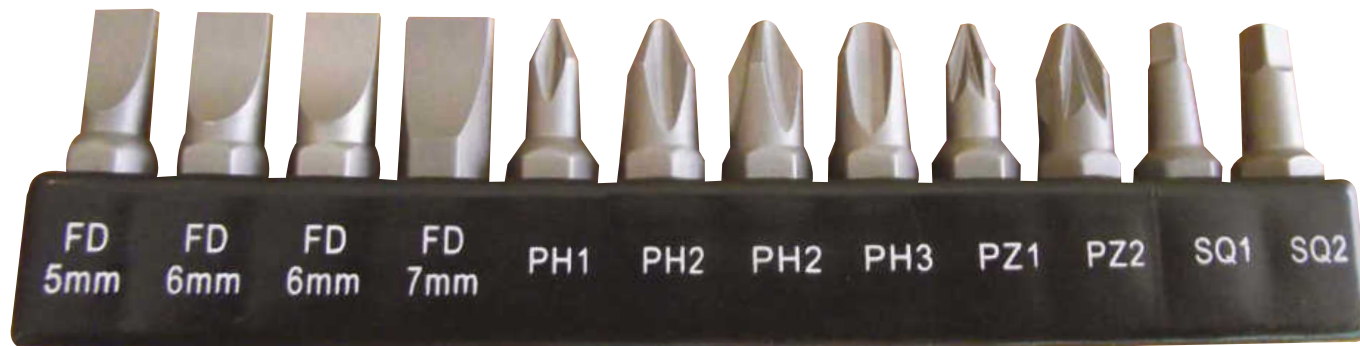
## Driver bits

Flat drives are found on traditional wood screws

Phillips drives were the first star type design

The Pozidriv is a modification of the Phillips

Square drives fit snugly



## Types of screw heads and screwdriver/driver bits



### Square drive screw heads

Square drive screws have been around since the early 1900s. They were invented by PL Robertson, hence the original name, Robertson-head screwdriver bit. The bit fits snugly into this type of head enabling accurate positioning and reducing the potential of stripped screw heads. It also makes one-handed operation possible. Roelof says, "In essence, these advantages equate to getting the job done more accurately and efficiently."



### Slotted (flat) screw heads

The slotted screw head was the first type ever developed and for a long time it was easier and cheaper to manufacture. This drive type is required for screws such as wood screws that have slotted (bladed recess) heads, also known as flat head drives. "A major disadvantage of slotted head drives is they don't provide a lot of grip for the screwdriver bit and can slip and damage the workpiece," says Roelof.

### Phillips screwdrivers

Phillips bits have four flanges that fit into the four recessed slots in the screw head. Roelof says these can slip and strip easily if the bit is slightly too big or too small for the screw head. The wrong size bit will fit into the screw head, but the moment load is applied, the screwdriver bit will slip and damage the screw head.

### Pozidriv

The Pozidriv screw head looks similar to a Phillips, but features some improvements. It was jointly patented by the Phillips Screw Company and American Screw Company and it is said that the name comes from the words 'positive' and 'drive' because of its positive advantages over Phillips drives. The design allows for more contact area between the head of the screw and the screwdriver.



### Security screw (one-way screws) heads

These are special screws that can be installed with a slotted screwdriver, but cannot be removed with standard tools. "They are used to prevent tampering and are used to install security gates, vehicle number plates or other applications where theft or vandalism is common or expected, such as public bathroom fixtures."



The Pozidriv has extra flanges set at 45° from the main cross recess on the screw head, which provide extra grip. "Although the Pozidriv is distinguishable from the Phillips drive, its main disadvantage is its similarity to the Phillips screw head. Many people are unaware of the difference and use the incorrect screwdriver, which leads to the screw head stripping."

### Torx drives

Developed in 1967, the Torx screw head features a six point star-shaped pattern – hence this driver is also known as a star drive. "These are commonly found in consumer electronics, such as computers and appliances like washing machines, kettles and irons. They were introduced to prevent tampering with appliances and electronics because the screwdrivers were not widely available. The Torx screw head is gaining in popularity and will find common place in the DIY scene."



### Torx driver bits



Source: Eureka DIY, [www.eureka.co.za](http://www.eureka.co.za)





Single sleeve keyless chuck allows for easy bit installation / removal

Variable speed control trigger

Reversing

## DHP459Z Cordless Impact Driver Drill

Brushless • Compact • Efficient



**BL  
MOTOR**  
Brushless  
Motor

The DHP459Z compact impact driver drill with high performance brushless DC motor has an overall length of 192mm, making it easy to work in confined spaces and further aided by the LED job light with pre-glow function.

Mechanical 2-speed gearing

16 Torque settings



Action mode settings

**LXT**  
LITHIUM-ION

**18V**  
LITHIUM-ION

### Brushless Motor Benefits:

- Maintenance free, due to the absence of brushes
- Increased energy efficiency, as no friction is produced
- Run-time of a single fully charged battery is increased
- Durable when used in continuous operation, due to lower heat production

#### Capacity:

- Steel: 13mm
- Wood: 38mm
- Masonry: 13mm

Impacts per minute (i/min)

Hi : 0-22,500

Lo : 0-6,000

No load speed (r/min)

Hi : 0-1,500

Lo : 0-400

Max. fastening torque

Hard: 45Nm

Soft : 25Nm

Batteries and charger sold separately  
Bit sold separately



# Kitchen time-savers

No more wasted time spent laboriously cleaning up – simply let the dishwasher do it all for you



By Aarifah Nosarka

Investing in a dishwasher can be a real game changer. Liam Gawne, product manager at Miele, a kitchen appliance manufacturer, says: “Nobody can argue the value of owning a dishwasher – due to its supreme convenience and time-saving functionality, it is one of the few appliances that will never be a grudge purchase.”

He adds that it is a common must-have appliance in modern homes. “High-end dishwashers are energy and water friendly, helping you to save money on utility bills.” According to Liam, for optimum performance it is essential that users have a good idea on how to pack their dishwasher in order to maximise performance.

## How to pack your dishwasher

Liam says that different stains require different treatments. “You can pack your dishes for optimum stain removal. Carbohydrate-based stains like those from potatoes need the full force of the water jets in a dishwasher to be cleaned away. Protein-based foods, like egg yolk and custard, require more contact with chemical detergents.”

Dishwashers operate using jets of water that get dispersed at high speed through the dishwasher’s arms. However, the entire interior of a dishwasher will get wet during a cycle. This does not mean that it will necessarily clean everything in the same way. Liam explains that this is

why, in some cases, a particularly stubborn piece of burnt food can be washed off in a wash cycle, while lighter stains remain. He recommends that you pack dishes with stubborn carbohydrate-based stains in closest proximity to the rotating arms to ensure that they get hit by the fastest-moving jets of water. “This would be at the centre of the bottom and the top racks.”

The areas located at the sides or edges of the dishwasher racks are the best-suited areas to pack dishes with protein-based stains. Water travels more slowly in those areas, and as such, the dishes placed there get more intense contact with dishwasher detergent, which is needed to remove such types of stains.



## What not to place in your dishwasher

What can and cannot be packed into the dishwasher? “Whilst there are those items that clearly state that they need to be hand-washed only, sometimes knowing what should and shouldn’t be cleaned in the dishwasher is not always easy to differentiate.”

### Gold- or silver-plated dishware

Cleaning your gold- or silver-plated cutlery in your dishwasher will lead to the gold plating wearing off over time. It is a far better option to simply rinse these in hot water and gently clean them by hand.

### Cast iron

Cast iron skillets or pans should not be cleaned in a dishwasher. For best results, rinse them with hot water immediately after cooking. Then remove any burnt food, dry and scrub them with a mild abrasive, such as coarse salt, for example. To prevent them from rusting, give a light coating of cooking oil.

### Good knives

Any expensive cooking knife should only be washed by hand, as it will dull quickly if washed in a cutlery basket in a dishwasher. To combat this, there are dishwashers that have a 3D cutlery tray, where sharp knives can be stored individually so that they do not knock against one another, leading to them getting blunt before their time.

### Crystal

The majority of dishwashers can’t handle very delicate crystal, as dishwasher detergent and the heat generated inside a dishwasher can cause the crystal to chip and crack. However, some high-end dishwashers allow for good quality delicate stemware to be washed with no risk.

### Wooden items

As a general rule, wood does not go well with water, so to avoid the chance of any cracking or warping, it is best to rinse

wooden spoons, bowls or cutting boards in warm running water, and dry them off by hand afterwards.

### Copper pans

If you clean your copper pans in the dishwasher, exposure to heat, air and humidity inherent in the dishwasher cycle will change their colour. Copper is actually toxic and cannot be exposed to the food that is being cooked inside. To prevent exposure, the pans are lined with a metal coating, usually steel or tin, that forms a barrier between the copper and the food. As such, they need to be carefully cleaned by hand, a plastic scourer and mild detergent to avoid damaging this layer, as if the barrier is damaged, the pots will be rendered unusable.

### Disposable aluminium

If you clean disposable aluminium in your dishwasher, it will lose its shine, become dull and turn a blackish colour. You also run the risk of getting black residue marks on all the other items in your dishwasher.



## Maintenance

Before using your dishwasher:

- Scrape off larger food particles from dishes. Most modern dishwashers are designed for smaller food particle removal. No rinsing is required unless dishes and cookware have been left sitting out for several hours.
- Ensure that plastic dishes are dishwasher-safe before placing them inside the device.
- Make sure your dishwasher powder is dry and use a measured amount as directed on the box.

### Caring for your dishwasher is simple

- Regularly wipe the dishwasher gasket. Use a warm rag and some household cleaner to wipe the space between the door and bottom of the tub where food particles often gather.
- Follow the dishwasher manufacturer’s manual on how to remove and clean the filter, generally located near the lower spray arm or bottom of the dishwasher. If the filter is damaged, replace it immediately.
- Avoid overloading your dishwasher.
- Repair dish racks and broken components. This involves repairs to the plastic coating racks and dishwasher components. If there is evidence of internal rusting, attend to it as soon as possible to avoid small shards of rusty metal entering the dishwasher pump. This will only lead to expensive future repairs. ✖



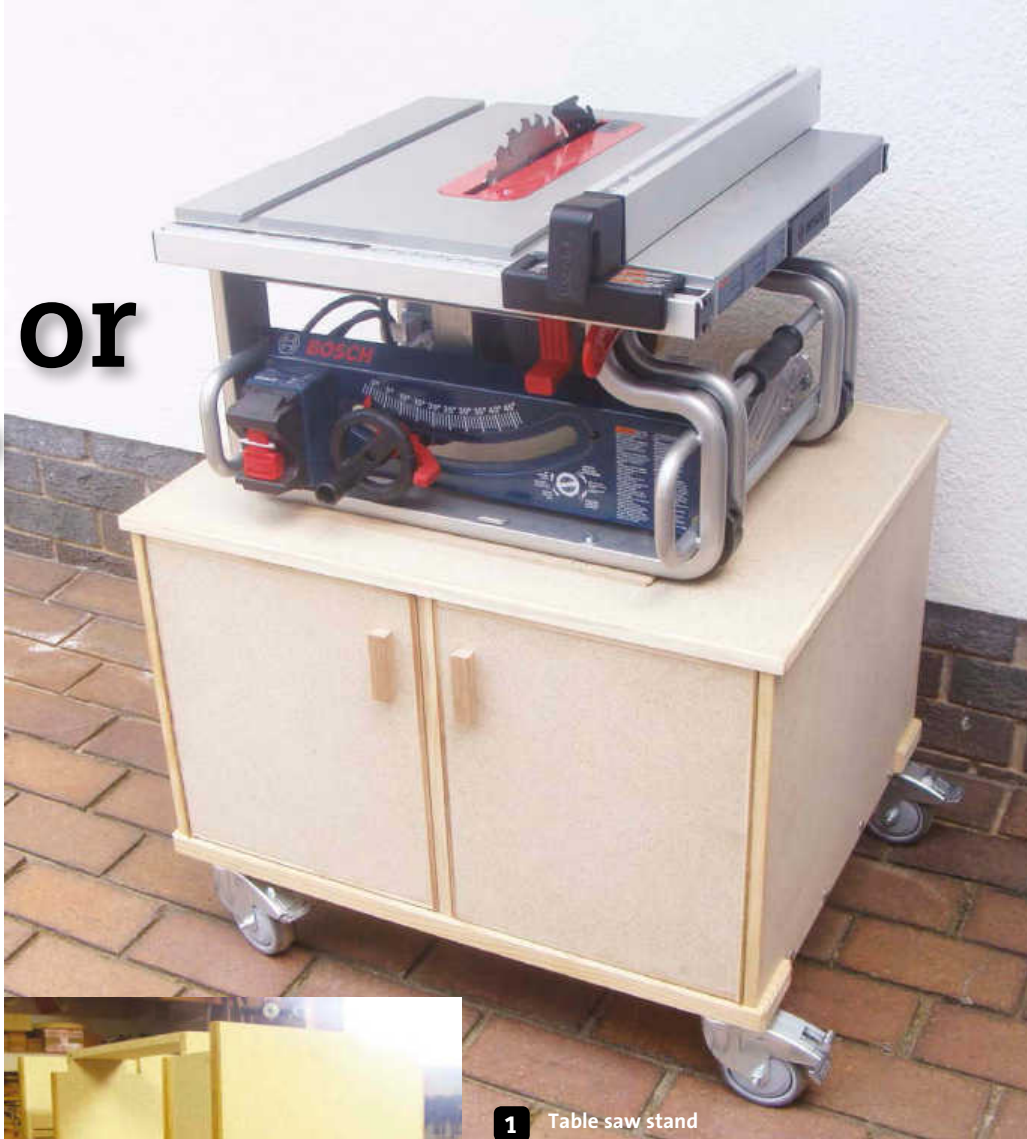
# Biscuits or dowels?

This month *Denis Lock* discusses the pros and cons of using dowels versus biscuit joints

I am currently helping one of my students build a stand for his Bosch table saw and a router table stand for his Triton router. The material of choice was 16mm chipboard. It is flat, stable, requires minimum surface preparation, comes in wide widths (no edge-to-edge jointing needed) and is relatively cheap. On the down side, the edges are ugly and weak. One of the courses I teach is 'Edging manmade boards' and we applied this knowledge to attaching a 6mm hardwood edging to all the exposed chipboard edges. The table saw stand (awaiting varnishing) is shown in photo 1. The router table stand (during construction) is shown in photo 2.

Having decided on a material the next decision was what type of joints to use. Chipboard does not lend itself to the type of joinery used in solid wood cabinet work – dovetails, dado and rebate and the like. Plain butt joints with mechanical reinforcement is what was called for. Nails and screws were rejected and we were left with a choice between biscuits and dowels. As this was a training exercise, a trial of each approach was made.

We started with a dowelled butt joint. This variation requires accurate marking out and accurate drilling. In general the pieces of chipboard involved are too large to handle



**1** Table saw stand

made jig will wear out quite quickly. Minor inaccuracy does not matter as the next aid will compensate for this.

The second aid is the dowel centre pin or marker shown in photo 5. These allow you to accurately mark the centres of the corresponding holes. The third aid is a guide strip and three clamps. Photo 6 shows a guide strip clamped to the piece of



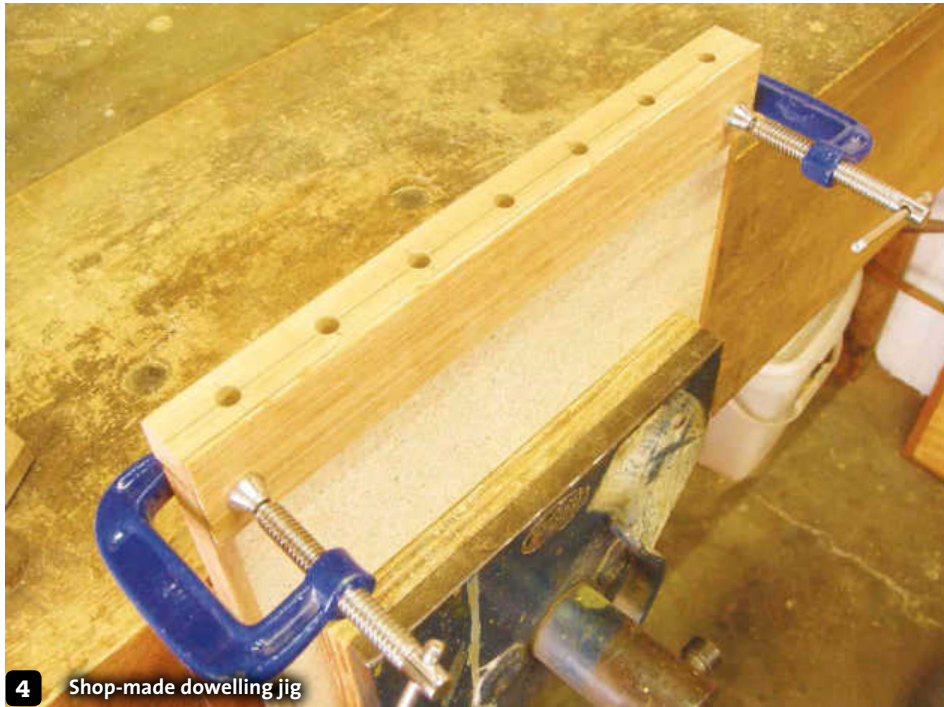
**2** Router table stand

on a drill press and have to be drilled by hand. Four accessories are a great help. The first is a dowelling jig. A commercial version is shown in photo 3. For this application only one of the two guide holes was used and the jig was moved for each hole. The jig was designed for use with 22mm material. A 3mm Masonite spacer centres the holes on our 16mm chipboard. A shop-made version (photo 4) is not difficult to make. A commercial dowelling jig has hardened steel inserts and will last for ever. A shop-



**3** Commercial dowelling jig

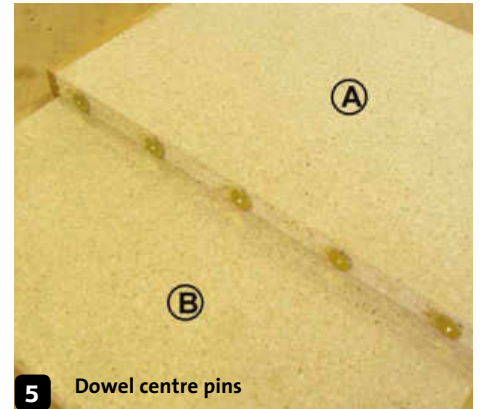




**4** Shop-made dowelling jig

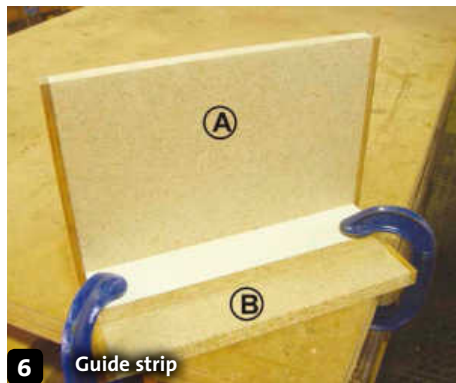
chipboard (B) about to be drilled. This guide strip is used to position piece B. A sash clamp and two pads ensure the left to right position is correct (photo 7). A tap with a rubber mallet transfers the centres, which we then highlight with pencil marks and a centre punch (photo 8). Photo 9 shows the joint ready for assembly. A dowel does not present a large gluing surface. In practice, the dowel holes would be drilled a lot closer than shown. I would use 40mm centres, but I have seen recommendations of 30mm. Photo 10 shows the assembled joint. Photo 11 highlights the fourth aid: a depth stop. Note that we are using a brad point drill. This gives accurate centring of the dowel holes. Avoid drilling dowel holes with an ordinary twist bit as the bit will wander off centre.

A biscuit joint is a lot simpler to lay out (a few tick marks) and to cut (photo 12). Accuracy comes a lot easier, provided, that is, that you don't adopt a slapdash approach of a biscuit cutter in one hand and a piece of wood in the other. I expressed my strong feelings on this subject in my August 2015 article so I won't say any more here. If dowel holes are not

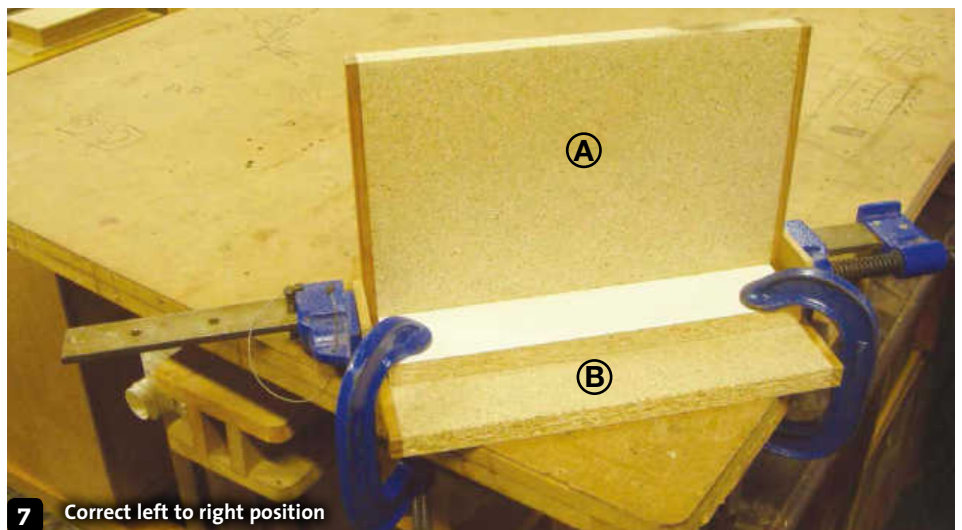


**5** Dowel centre pins

correctly spaced, a 5kg hammer won't get the joint together. A biscuit joint is a lot more forgiving. The layout marks can be 10mm out and the joint will still fit perfectly. This can also be a disadvantage. As can be seen in photo 13, the joint can end up being badly aligned in the left to right direction if due care is not taken during glue-up. This is normally not a problem when two or three pieces (one or two biscuit joints) are being glued at a time; the alignment can be corrected. I plan and sequence my glue-up so that this is the case if possible. I would rather spend extra time on additional assembly steps than fight with too many clamps, too many pieces of wood and too many biscuits all at once. Add to this glue that is starting to reach its open time and the problem is compounded.



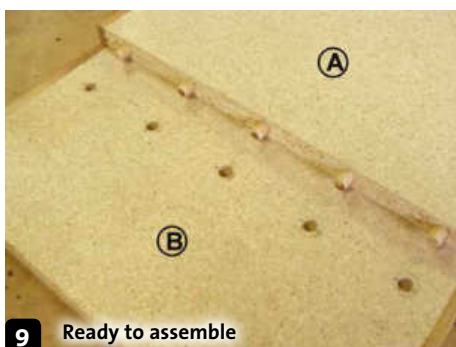
**6** Guide strip



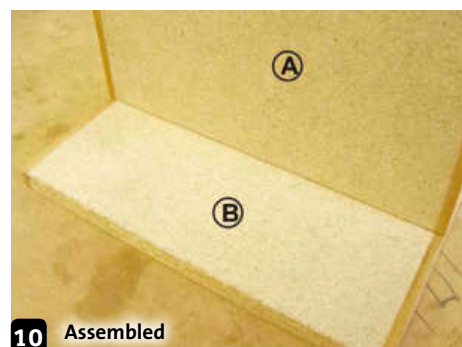
**7** Correct left to right position



**8** Centres marked



**9** Ready to assemble



**10** Assembled

The final assembly step can be a problem. Photo 14 shows the final assembly step on a previous cabinet. There is no way you can avoid seven pieces of chipboard, 22 biscuits, five sash clamps and two C-clamps all at once. This final step must be well-rehearsed, all the clamps must be at the correct opening and the cauls and clamping pads must be right at hand. The best-laid plans of mice and men often go awry. The one joint did not line up correctly (photo 15). By the time I noticed it the glue had already grabbed and I had a lot of sanding to do – the glitch seen in the photo and the corresponding one at the other side of the board.

### What did I learn?

What are the pros and cons of the two approaches? Dowel joints do not require a lot of extra equipment. You must already have a drill, you can make your own dowelling jig, and a brad point drill bit, a set of dowel points and a depth stop won't



**11** Brad point drill bit

break the bank. A biscuit cutter will set you back about R1 000. It is, however, a very useful tool to have in your tool kit and can be used for a lot more joinery operations than chipboard cabinets. It is definitely a lot quicker to lay out and less demanding to cut biscuit slots than it is to drill dowel holes. The cost of dowels and biscuits are much of a muchness. You will, however, probably use double the number of dowels.



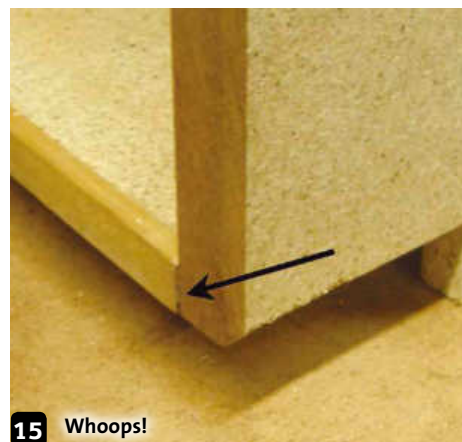
**12** Biscuit joint ready to assemble



**13** Bad alignment



**14** Final step of complex assembly



**15** Whoops!



The major problem with dowels is the limited gluing area. A #20 biscuit has a much larger gluing area: compare photos 9 and 12. Without a doubt, a biscuit joint is stronger than a dowel joint. The execution of a dowel joint is demanding and not at all forgiving: the dowel hole centres either match or they don't. A biscuit joint is a lot more forgiving but this can come back and bite you (photos 13 and 15).



**16** Dowel centre pin

*The commercial dowelling jig shown in photo 3 was obtained from Sam's Creations, Wendywood, Sandton. Call Lionel Soekoe on 072-989-6310. ✖*



**17** Marking dowel hole centre



## Contact

Denis Lock runs a router school and shop in Bedfordview, Gauteng. He can be contacted at [denis.lock@worldonline.co.za](mailto:denis.lock@worldonline.co.za) or 082-267-5948. Visit his website at [www.routingwithdenis.co.za](http://www.routingwithdenis.co.za)

We used biscuit joints in both cabinets. We both own a biscuit cutter so capital outlay was not an issue. Joint strength and ease of layout and cutting were the overriding factors. What about the misalignment problem? Why not have the best of both worlds and not combine biscuits and dowels? This is exactly what we did. Two positioning dowels were added to the potentially troublesome joints: the joints involved in the final stages of assembly. Photos 16, 17 and 18 show how this was done.



**18** Two alignment dowels added to biscuits



### The Woodworker's Corner is a woodworking showcase

#### Heat Wave Competition

Tools4Wood, an online woodworking shop, runs this competition four times a year and woodworkers are encouraged to post their completed projects onto its Facebook page and website. Entrants and followers of the pages can 'like' the projects that appeal to them. Gareth Williams from Tools4Wood says, "Thank you to everyone who entered our Heat Wave Competition. The entries were fantastic and we are happy to see the extent of the woodworking talent in South Africa."



▲ Ian De Jager received the most 'likes' for his media storage centres for compact disc storage and won himself a Kreg Jig Master System (K4MS). The shelves were made from 16mm MDF and were painted with Rust-Oleum, and a sheet of black laminated pressed wood formed the base



▲ Albert Pretorius submitted his buddies bin featuring beautiful dovetails. "My wife always complains about the papers and things scattered on my desktop where my computer is – this is my solution."



▲ Don MacIver entered this coffee table made from an old door. "The wood is Oregon and is at least 100 years old. "The top shows marks of having had radii and circles marked on it at one time - perhaps it was originally a table. Also, it was attacked by woodworm at some stage. Recycling at its best!"



#### Woodworking associations

Woodworking associations' details are available on our website at [www.homehandyman.co.za](http://www.homehandyman.co.za)



# BOOKSHELF

General manager at Hardware Centre Marius Ackerman reviews the latest in woodworking literature

## Wood Pallet Projects

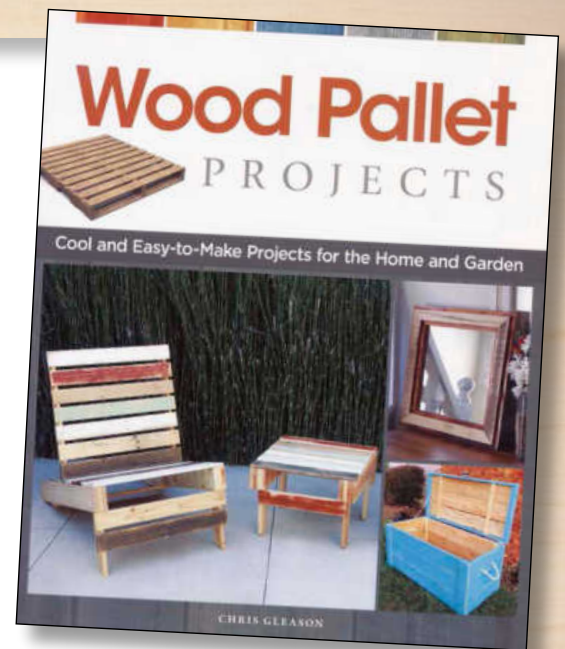
Author: Chris Gleason

Publisher: Fox Chapel Publishing

Wood pallets are a vital component of shipping industries, and have recently grown in popularity with woodworkers all over the world. It is not hard to see why – pallet wood is cheap (often free), and offers character to any woodworking project with its rugged and weathered look.

*Wood Pallet Projects*, a 127-page soft cover book, shows how anyone can easily upcycle salvaged pallet wood to create truly one-of-a-kind projects. Chris Gleason combines sound woodworking techniques with a hip designer's sensibility to unleash the limitless possibilities of the common skid. The author gives plenty of information on pallets – where to find them, how to process them into usable lumber and what fasteners, sanding and finishes to use.

Some projects in the book celebrate the rough, edgy character of the material used, while others are crafted as fine furniture. It shows how to construct both indoor and outdoor furniture in a variety of styles, and includes fun projects such as a birdhouse, a toolbox and even a ukulele.



For more information, contact Hardware Centre on 011-791-0844 (Randburg) or 021-421-7358 (Cape Town)



▲ Clive Husband submitted toy boxes, a stool and a nappy box he made (seen on left)



Please send us pictures of your projects. Write a caption with your name, inspiration, type of wood, etc. and send it to [editorial@homehandyman.co.za](mailto:editorial@homehandyman.co.za)

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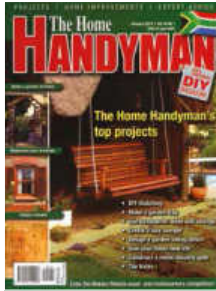
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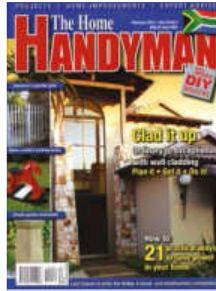
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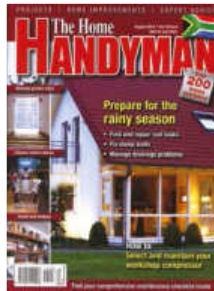
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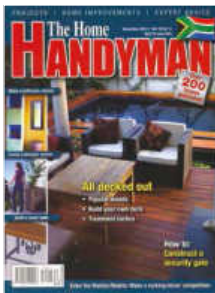
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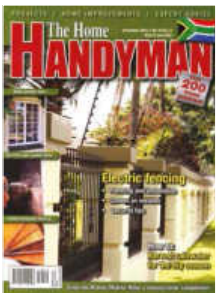
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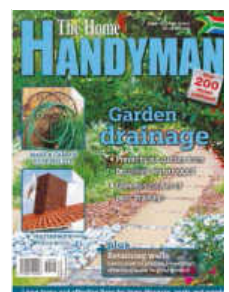
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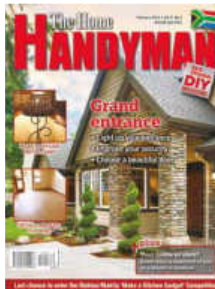
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# Let's get social

DIY has a social media side as well. Here are some of the tweets that graced the @HomeHandymanmag Twitter page this past month



**@HouseofPaintSA**

Make a small space feel large. Get bookshelves that are tall & take up less floor space for all your books, décor items & more. #Decor #tip



**@MyFixitUpLife**

Painting a wall a dark colour can create the illusion that it's receding into the background



**@BuildersFan**

Make this easy and beautiful DIY love seat from two wooden chairs in #LoveYourHome <http://goo.gl/UG6qjL>



**Facebook page of the month**

This month's Facebook page of the month is Bosch Power Tools with 84 999 page likes. The page features a variety of power tool reviews as well as ideas, videos and competitions. The power tools division of the Bosch Group is a market leader for power tools and power tool accessories. The core success factors are innovative strength and pace of innovation. Each year, Bosch launches more than 100 new power tools onto the market. The Bosch Group is a global supplier of technology and services. It has more than 350 subsidiaries and regional companies in over 60 countries.

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**@ProToolReviews**

How about this indoor or outdoor wood #pallet storage?



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## At the polls

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Reuben the Screwman scares the daylight out of some big men from the SANDF with a replica of a human hand



# 'The Hand' of doom

While ill in bed the other day, I watched a documentary on the Vietnam War that brought back a memory of a very funny incident that took place some years ago. I held some contracts with the then SANDF to supply bolts and nuts to the maintenance unit in Voortrekkerhoogte. As a result, I met some interesting characters as well as some downright boring creatures – so boring that they could make mud look interesting. Sergeant Frans Van den Berg was a combination of both. He could waffle on, spewing out the most ridiculous rubbish about the Bush War.

I already had a few laughs just imagining what was to take place, but nothing could have prepared me for what actually happened

There was this story he would relate, which I am sure he saw in the movie *Dam Busters* or something similar. He would tell us of how his platoon was ambushed and the battle that ensued. How he covered his mates and saved lives. Then came the finale, when he would climb up the side of a tank and open the hatch and toss a grenade inside before closing the door again. Ending with a graphic description of the scene.

On one of my trips to Taiwan, I had bought a silicone replica of a human hand. It looked and felt just like a hand. This hand brought me many hours of joy, playing pranks on unsuspecting friends but Frans deserved an academy award for his performance.

We had just sat through one of his tales of woe when the idea popped up in my head: Frans was going to meet 'The hand'. Whilst he and his sidekick went off to do the paperwork, I offered to load his bolts into his 'bakkie'. I moved the seat right forward, which would force him to pull the lever and move the seat back. I placed 'The Hand' right next to the seat lever. As if that were not enough, I poured talc into both air vents and opened the fan full blast.

The time had come: Frans and his sidekick, with ears like a wing nut, came down the driveway towards the car park. I could hardly contain myself whilst waiting for them, I already had a few laughs just imagining what was to take place, but nothing could have prepared me for what actually happened.

He opened the door, slid in onto the seat that was now far too close to the steering wheel with a "Who the #€€ moved my €%^& seat?". As if the following scene were choreographed, he turned the ignition and at the same time bent down to adjust the seat. The fan kicked in at top speed, a white cloud engulfed the cab, Frans saw 'the hand' and sat up as if his spine had turned into spring steel. Big ears was screaming like a 12-year-old at a rock concert, whilst Frans was wildly trying to open the door. A white, ghostly figure made its way up the driveway at full gallop, with a screaming big ears following closely behind. After helping him clean the talc from his hair and ears, I made him a strong cup of coffee to help settle his nerves.

I am not sure if this story ever became one of his tales of woe. ✖





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